

# ANNUAL REPORT

## of the ACM Europe Council

*For the Period: July 1, 2019 - June 30, 2020*

**Submitted by Panagiota Fatourou**

### 1. BASIC INFORMATION

#### 1.1 Members of the Board

**Executive:**

**Chair:** *Panagiota Fatourou*, University of Crete and ICS FORTH, Greece

**Vice Chair:** *Tom Crick*, Swansea University, UK

**Secretary and Treasurer:** *Valerie Issarny*, INRIA, France

**Past Chair:** *Chris Hankin*, Imperial College London, UK

**Members:**

*Anastasia Ailamaki*, EPFL, Switzerland

*Oliver Grau*, Intel Cooperation, Germany

*Yannis Ioannidis*, University of Athens, Greece

*Harald Storrle*, QAware, Germany

*Julie Williamson*, University of Glasgow, UK

**Invited Observers:**

*Wendy Hall*, University of Southampton, UK (Informatics4All)

*George Eleftherakis*, University of Sheffield International Faculty, Greece (CECL)

*Ruth Lenon*, Letterkenny Institute of Technology, Ireland (ACM-W Europe)

*Enrico Nardelli*, Università di Roma "Tor Vergata", Italy (Informatics Europe representative)

*Björn Levin*, RISE-SICS, Sweden (ERCIM representative)

#### 1.2 Standing Committees

**Informatics4All:** *Wendy Hall*, University of Southampton, UK

**ACM Europe Technology Policy Committee:** *Oliver Grau*, Intel Cooperation, Germany

**Committee of European Chapter Leaders (CECL):** *George Eleftherakis*, University of Sheffield International Faculty, Greece

**ACM-Women Europe:** *Ruth Lenon*, Letterkenny Institute of Technology, Ireland

**ACM European Fellows Workgroup:** *Anastasia Ailamaki*, EPFL, Switzerland (October 2019- now)

#### 1.3 Ad Hoc Committees

None.

## 2. SUMMARY

The ACM Europe Council focuses on a wide range of ACM activities and on encouraging greater participation of Europeans in all dimensions of ACM. It aims to promote dialogue and the exchange of ideas on technology and computing policy issues between the European Commission and other governmental bodies and funding agencies in Europe, and the informatics and computing communities. It also aims to foster education in the computer science field in Europe, to award and disseminate the achievements of European computer professionals, to support gender equality in the European computing landscape, and to promote access to the computer-related scientific frontiers.

The main activities of the ACM Europe Council include:

- Engage with the European Commission of the EU and other national and international funding agencies, as well as with the European Parliament and other policy bodies in relevant activities and initiatives.
- Collaborate with other computing and scientific organizations in Europe to offer new programs and activities (in particular Informatics Europe, ERCIM, CEPIS, IFIP).
- Increase nominations of ACM European members for the advanced member grades of Senior Member, Distinguished Member, and Fellow, and for ACM Awards.
- Work with ACM SIGs to increase the number of ACM conferences in Europe and provide ACM awards to the best student papers in some of these conferences.
- Support the Heidelberg Laureates Forum.
- Support ACM Summer Schools in Europe.
- Increase the number of ACM chapters and level of chapter activity in Europe.
- Support gender equality in the European computing landscape.

The ACM Europe Council is anticipated to have two face-to-face meetings per annum. In 2019/2020, the first took place in London in October 2019. Due to the covid19 pandemic, the second took place online in March 2020.

One of the main priorities of the ACM Europe Council is to strengthen the excellence aspect of ACM in Europe. In 2019/2020, the Council put special emphasis on empowering its activity in giving credit to distinguished European researchers by establishing a new working group, whose role is to come up with the appropriate mechanisms to help increase the number of successful nominations of European researchers for the advanced ACM member grades (see more details below).

Moreover, the ACM Europe Council, together with Informatics Europe, has nominated a candidate for membership in the Group of Chief Scientific Advisors to the European Commission in June 2020 (the results have not yet been announced).

A second main priority of the Council is to strengthen participation of European young scientists in various ACM activities. To this end, the Council sponsored two summer schools: the third edition of the ACM Summer School on Data Science that took place in Athens in July 2019, and a new Summer School on HPC Architectures for AI and Dedicated Applications which took place in Barcelona in July 2019 (see more information in the Appendix).

In addition to the activities described above, major activity has been carried out by the Council's Standing Committees and its working groups as described in the Appendix. Finally, the ACM Europe Council endorsed a policy paper on Gender Bias in Artificial Intelligence, authored by Panagiota Fatourou (Chair of the Council), Chris Hankin (Past Chair of the Council), and Bran Knowles (member of the ACM Europe Technology Policy Committee).

### **3. PLANS**

For the next year, the Council envisions stronger contribution towards enhancing the list of ACM Distinguished Speakers by coming up with a list of well-known European professionals that have also been acknowledged as excellent speakers. Moreover, it also envisions stronger collaboration with the ACM SIGs to better fulfil its goal of strengthening the excellence aspect of ACM in Europe, e.g. by increasing the number of ACM conferences in Europe, and other similar activities. Additionally, the Council will continue supporting the two summer schools mentioned above and will contribute towards increasing the number of ACM summer schools in Europe. Finally, the Council aims at contributing in the development of the second Special Section on Europe in the CACM, if it is asked to do so.

The appendix provides additional information on the forward planning of the Council's Standing Committees and working groups which carry out the major ACM Europe Council activities.

### **4. COMMENTS**

None.

## APPENDIX

### Europe TPC (Report by Oliver Grau)

*In fiscal year 2019/2020, the committee moved under the responsibility of the newly established ACM Technology Policy Council (chaired by Lorraine Kisselburgh) from the previous status as an ACM Europe Council sub-committee.*

#### Membership

Oliver Grau (chair)

Gabriele Kotsis, Michel Beaudouin-Lafon, Michel Yves Cosnard, Mario Fritz, Fabrizio Gagliardi, Amalia Hafner, Wendy Hall, Chris Hankin, Paola Inverardi, Joaquim Jorge, Andrew McGettrick, Gerhard Schimpf, Paul Spirakis, Bran Knowles, Alejandro Saucedo, Julie Williamson, Tom Crick

The ACM Europe Technology Policy Committee promotes dialogue and the exchange of ideas on technology and computing policy issues with the European Commission and other governmental bodies in Europe, and the informatics and computing communities. The Committee engages in policy issues related to the importance of technology in boosting jobs, economic growth, competition, investment, research and development, education, inclusive social development, and innovation. It promotes sound public policy and public understanding of a broad range of issues at the intersection of technology and policy.

The committee meets online (about) bi-monthly. Further, the committee met physically in London on October 7, 2019, co-located with the Europe Council meeting. A meeting planned in Paris in March 2020 took place as an online event, because of the COVID-19 situation.

#### Activity

The committee selected three topic focus areas that were further worked out:

1. Security & privacy and smart cities,
2. IT in the light of climate change and
3. Differential AI.

Working drafts were prepared on AI, Smart Cities: Principles for Security, Privacy, Fairness and Sustainability, and Sustainable IT in the light of Climate Change. Currently the drafts are awaiting further feedback and instructions from TP Council tech brief committee, which is in set-up.

**Dissemination of statements and white papers.** On 5<sup>th</sup> May 2020, the Committee published a statement on Essential Principles and Practices for COVID-19 Contact Tracing Applications, as a response on the polarized situation about technical approaches and risks on privacy and fraud, etc. The prime authors of this statement were Michel Beaudouin-Lafon, Enrico Nardelli, Gerhard Schimpf. The statement was perceived timely and received predominately positive responses.



#### ACM Europe TPC Statement on Contact Tracing

ACM's Europe Technology Policy Committee issued detailed principles and practices for the development and deployment of contact tracing technology intended to track and arrest the spread of COVID-19. Europe TPC's statement calls on governments that adopt such systems to choose "only those which... respect and protect the rights of all individuals; safeguard personal data and privacy to the highest degree technically possible; and are subject to scrutiny by the scientific community and civil society before, during and after deployment." [Read the statement in Italian here](#) and in [French here](#).



### ACM Europe TPC Comments on AI White Paper [↗](#)

ACM's Europe Technology Policy Committee submitted comments to the European Commission on "Artificial Intelligence—A European approach to excellence and trust," which addresses the future of AI in Europe. The comments, submitted in questionnaire form, asked the Commission to rate priorities based on their perceived importance, such as skills and training; public/private partnerships; and financing for startups.

Moreover, the Committee prepared and submitted responses on the following two initiatives of the European Commission, both reflecting well the focus areas mentioned above:

- the European Commission Consultation on the Whitepaper on AI, and
- the European Commission's consultation on its proposed Green Deal.

The committee also endorsed a White paper on Gender Bias in Artificial Intelligence, authored by Panagiota Fatourou, Chris Hankin, and Bran Knowles, as work from the ACM Europe Council.

**Liaisons with other initiatives.** The committee is in close collaboration with several other initiatives or committees. Europe TPC closely collaborates with the Informatics4All Coalition to ensure greater dissemination of their outputs.

**Participation in European initiatives and events.** Members of the ACM Europe TPC have represented the Committee in the following events:

- SAM / SAPEA "Transforming the Future of Ageing", Chris Hankin participated in a workshop.
- AI Alliance and HLEG High-Level Expert Group on Artificial Intelligence (contact: Alejandro Saucedo, observing: Oliver Grau)
- EU Digital Assembly 2019 in Bucharest. Gerhard Schimpf and Fabrizio Gagliardi participated on behalf of the ACM Europe TPC in the EU Digital Assembly. The assembly discussed a number of policy relevant topics and gave insights on the set-up and directions of the coming period of the EC.
- Science|Business Event (10<sup>th</sup> September 2019): Horizon Europe: New Parliament, new Commission, new agenda. Oliver Grau and Fabrizio Gagliardi participated on behalf of the ACM Europe TPC.
- Science|Business Roundtable "Responsibly intelligent: Towards an international agreement on the ethics of artificial intelligence", Science|Business Annual conference, February 4, 2020. Bran Knowles participated on behalf of the ACM Europe TPC.
- 2020: Horizon 2050 : Towards a greener, smarter world. Oliver Grau representing ACM Europe TPC on a panel, *Artificial reality: Can industry redefine itself through AI?*

**Preparation of Set-up of exec board.** The Europe TPC meeting on March 12, 2020 identified a need to better support the dissemination and alignment with EU policy stakeholders. The committee prepared formation of an agile acting executive board to steer and channel the Europe TPC work.



### ACM Europe TPC Comments on Green Deal [↗](#)

ACM's Europe Technology Policy Committee submitted comments to the Directorate General for Climate Action of the European Commission in support of the comprehensive and ambitious sweep of the Commission's Green Deal. ACM Europe TPC strongly concurs with the Commission's premise that realizing true energy efficiencies in the information and communication technology (ICT) sector will be critical to Europe's success in meeting the Green Deal's appropriately aggressive climate targets.

## Informatics4All (Report by Andrew McGettrick)

### Membership:

Wendy Hall (chair)

**ACM Europe:** Judith Gal-Ezer, Andrew McGettrick

**Informatics Europe:** Michael Caspersen , Enrico Nardelli

**CEPIS:** Gerald Futschek, Austeja Trinkunaite

The Informatics for All coalition was created to advocate for the inclusion of Informatics as a foundational discipline in schools across Europe. Informatics for All aims at getting academia, industry, government and society together to influence education policy in Europe towards the full recognition and establishment of Informatics as a foundational discipline in schools. The coalition involves ACM Europe, CEPIS (the Council of European Professional Informatics Societies) [<https://cepis.org/>] and Informatics Europe [<https://www.informatics-europe.org/>]. It is managed by a Steering Group with Wendy Hall as the chair and other members as listed above. The I4All Steering Group also benefits from the support of Bobby Schnabel who acts as an Advisor.

Informatics for all now has its own web site: <https://www.informaticsforall.org/> and its own visual identity (logo) which can be found at its web site.

### Activity

The major activities of the Steering Committee for the reporting period are discussed below.

**Ongoing Liaison with EU.** A close relationship has been established with key members of the EU administration. This resulted in Enrico Nardelli, Michael Caspersen, Gerald Futschek and Austeja Trinkunaite to attend, on behalf of Informatics for All, a meeting in Brussels for a discussion on Informatics education at school level; that meeting hosted (by invitation) only 12 attendees. Furthermore, Wendy Hall and Enrico Nardelli had a meeting with Dara Murphy on 6<sup>th</sup> February 2020 who was then in close contact with EU Cabinet thinking.

A workshop was planned to take place in Brussels in March 2020 to build on the success of the first [Informatics for All Workshop](#) that took place in Brussels in February, 2019. Due to Covid-19 outbreak, this was revamped to take the form of a webinar and took place on 17<sup>th</sup> March, 2020. The event was on invitation only and was attended by approximately 55 participants. At this event, Informatics for All presented its work and discussed with representatives of the European Commission about their new plans regarding the promotion of Informatics education in Europe at school level. Georgi Dimitrov from EC DG Education and Culture attended the event and spoke about developments within the EU. As an outcome, education in Informatics is expected to feature in the revised EU Digital Education Action Plan. The



Figure 1: Presentation by Georgi Dimitrov



Figure 2: Introduction by Wendy Hall during the webinar

took place at the end of March 2019 in Rome, it was agreed to formulate the **Rome declaration**. In brief, this calls upon all European national and international institutions *to exercise their moral suasion power so that the principles of Informatics are included as part of school curricula at all levels*. It goes further in calling for appropriate levels of funding to be made available essentially to support the aims of Informatics for All. The complete declaration is available at <https://www.informaticsforall.org/declaration>. This site has attracted a lot of attention. To date (July 2020), around 250 signatories have been obtained. The declaration has now been translated into French, German, Greek, Hebrew, Italian, Polish, Romanian, Russian and Spanish.

**Extending the Coalition.** IFIP (more particularly its Technical Committee 3 on Education, chaired by Don Passey, Lancaster University, UK – see more information at <https://www.ifip-tc3.org/>) has been invited to join the Coalition for one year, and they have accepted the invitation. This period will act as preparatory to reach a final decision regarding the formal inclusion of IFIP to the Coalition.

**CEPIS Curriculum Group.** Detailed school curricula are the responsibility of individual education authorities throughout Europe. Informatics for All is currently working on developing of an Informatics Curriculum Framework to address curriculum issues at a high level. As CEPIS already had a working group to develop such a framework, agreement has been reached to continue the development of the framework jointly with Informatics for All. The framework will target education level 3 (end of mandatory education) and it will take into account the 2016 K-12 Computer Science Framework ([k12cs.org](http://k12cs.org)) which has been produced jointly by ACM, code.org, CSTA, and others.

**Liaison with Pisa.** Informatics for All was invited to participate in early discussions about the Pisa

webinar has been video-recorded and is available, together with More information, as well as a video recording of the entire webinar is available at <https://www.informaticsforall.org/2020-workshop/>

The EU planned a meeting on 18<sup>th</sup> March to air ideas about their revised Action Plan, but this was rescheduled as an online event on 30<sup>th</sup> March, 2020. Enrico Nardelli attended it on behalf of Informatics for All.

Further liaison with the EU would take place at the time of the Informatics Europe Computer Science Summit (ECSS) to be held on 26-28 October 2020.

**The Rome Declaration.** At a meeting that

### Rome Declaration

An important outcome of the Informatics for All coalition was the issuing of a declaration to national and international institutions to draw attention to the role that these institutions might play in the promotion of Informatics for All.

If you would like to support our Rome Declaration, please have your organization [sign it](#). We now have [more than 250 signatures!](#)

[– French Version](#) – [German Version](#) – [Greek Version](#) – [Hebrew Version](#) – [Italian Version](#) – [Polish Version](#) – [Romanian Version](#) – [Russian Version](#) – [Spanish Version](#) –

Science assessment. In particular, these discussions aimed to address issues such as determine what would be the basis of that assessment, and whether Informatics would be included in it. After a number of virtual meetings, the outcome was a positive Strategic Vision Report which reflects thinking about the forthcoming assessment of Science and mentions Informatics as one of three novel knowledge areas. Note that this report represents the current thinking within Pisa (but not necessarily reflect the final position regarding the assessment of Science).

**ITICSE 2020.** Members of the Informatics for All Steering Committee participated in overseeing the organizing of the ITiCSE 2020 [<https://iticse.acm.org/>]. The conference took place virtually on 15<sup>th</sup> -19<sup>th</sup> June 2020 and it was quite successful with 390 registrants. The ACM Europe Council/Informatics for All supported its best paper award, as well as the ITiCSE Doctoral Consortium (which funded attendance at the conference of some research students).

**National Workshops.** The following three workshops at national level promoted Informatics for All:

- On 3<sup>rd</sup> October 2019 at TU Wien, Austria with around 150 attendees, organised by Gerald Futschek.
- On 8<sup>th</sup> February 2020 in Milan, Italy with 150 attendees, organized by Enrico Nardelli.
- On 1-3<sup>rd</sup> July 2019 at the Israeli CS Teachers Centre, organised by Judith Gal-Ezer.

**CC2020 project.** Informatics for All (and ACM Europe) was represented by Judith Gal-Ezer on the CC2020 project.

## CECL (Report by George Eleftherakis)

### Membership

George Eleftherakis (Chair)

Bozena Mannová (Vice-Chair), Gavin Doherty, Taras Panchenko, Josephina Antoniou.

The Committee of European Chapter Leaders (CECL) assists chapters in Europe, acting as a link between them and ACM, and contributes in increasing visibility of ACM among young people in Europe. It is composed of volunteers and aims to:

- Promote expansion and sustainability of ACM chapters in Europe.
- Facilitate and help improve existing chapter operation.
- Communicate and share information between chapters.
- Increase the visibility of chapters and of ACM itself.
- Promote and reward best practices.
- Mentor less-experienced members.
- Expand the Distinguished Speakers Program (DSP) in Europe and make it more easily accessible.
- Increase the European participation in the ACM International Collegiate Programming Contest (ICPC).
- Increase visibility of ACM among young people in Europe aiming to attract/sustain younger people and overall members to ACM.

At the moment, there are more than 90 ACM Professional and Student Chapters across Europe (Figure 3). Each of these chapters has a series of technical events that will provide both interesting technical content and career networking opportunities.

### Activity

CECL following its strategy, actively supported ACM events in Europe (ACM Summer schools in Europe, womENCourage 2019 and 2020). It also continued its mentoring efforts to new and old ACM chapters in Europe even visiting physically several of them. In order to identify the needs of ACM Europe members, CECL performs a qualitative study on the substantial amount of knowledge regarding the chapters' needs and the best practices that gathered through the three workshops for chapters leaders organized by CECL in the past, and the experience gained through mentoring. CECL aims to disseminate this knowledge but also to carefully design new approaches to work with members in Europe.

Europe CECL is in the process of designing a first pilot online version of a workshop for chapters, in collaboration with ACM-W Europe. It was also more involved in the initiative of ACM best paper awards, taking over the management of this initiative, and it continues the successful recruitment of DSP speakers in Europe. Regarding ACM best paper awards, it is in the final steps of well establishing this sub-committee and the process followed.

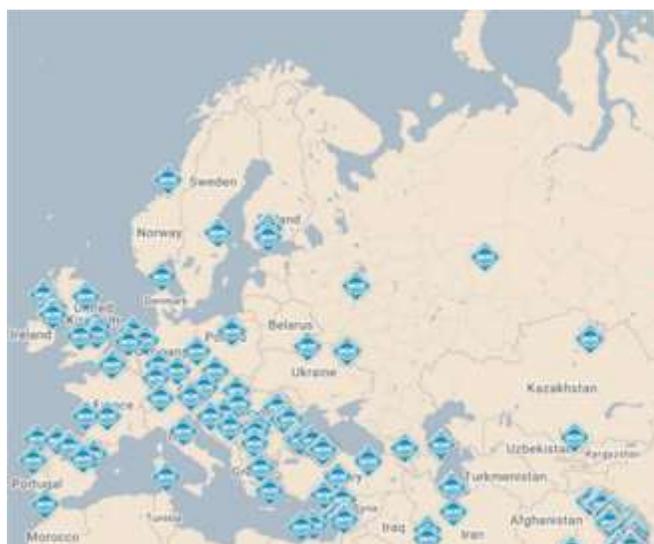


Figure 3: ACM Chapters in Europe

## ACM-WE (Report by Ruth Lenon)

### Membership

#### Executive Committee

Ruth G. Lennon, Letterkenny Institute of Technology, Ireland (Chair)

Natasa Milic-Frayling, University of Nottingham, UK (Chair: Aug-Nov 2019, Past Chair: since Dec 2019)

Chiara Petrioli, Italy (Vice Chair for Strategy)

Rukiye Altin, Turkey (Vice Chair for Operations & Treasurer)

Cigdem Cengul, UK (Communications Chair)

Olja Rastic-Dulborough, IBM, England (Digital Awards Chair)

#### Ex-Officio

Jodi Tims, ACM-W Chair, OH, USA

Panagiota Fatourou, ACM Europe Chair, FORTH, Greece

Reyyan Ayfer, Bilkent University, Turkey (ACM-W Regional Chair)

Pat Ryan, ACM Headquarters, New York, USA

ACM-WE (ACM Women in Computing Europe) Committee that was set up to fulfill the ACM-W mission in Europe is in its 8th year. Its mission is a transformed European professional and scholarly landscape where women are supported and inspired to pursue their dreams and ambitions to find fulfillment in the computing field.

### Activity

**Celebrations of Women in Computing in Europe.** The main activity of ACM-WE is womENCourage ACM Celebration of Women in Computing. The 5th womENCourage was hosted by Sapienza, Italy (<https://womencourage.acm.org/2019>). The 6th womENCourage will be hosted in virtual format by ADA University, Azerbaijan [<https://womencourage.acm.org/2020>]. The next table summarizes the past and current womENCourage in numbers.



	2014 No registration fee	2015 Registration fee	2016 Small registration fee	2017 Registration fee	2018 Registration fee	2019 Registration fee
<b>Attendance</b>	207 (256 reg.)	163 (193 reg.)	100 (110 reg.)	184	120	350 (409 reg.)
<b>Scholarships Awarded</b>	54 (of 114)	53 (of 66)	42 (56)	72	20 (of 75)	108 (of 149)
<b>Posters</b>	49 (of 119)	43 (of 50)	32 (of 39)	70(91)	38 accepted (of 44)	81 accepted (of 127)
<b>Supporters</b>	8	10	7	16	9	14
<b>Countries</b>	28	25	24	31	23	35

2019 Poster submissions 127 32 countries represented

2019 Scholarship applications 149, 108 accepted & attended, 18 countries were represented

Supporters for the 2019 event included: Regione Lazio, Eni, EY, Lazio Innova, Sapienza, SIGCHI, Accenture, Google, Links, Oracle Academy, VarGroup, Rai Way, Uc3m, Avio Aero, Fondazione Bracco, Fondazione Ugo Bordoni, CTNA, IBM, CINI, CRAT, Microsoft, WSense, Fondazione Balsano, Informatics Europe, LYIT, Fondazione Mondo Digitale, IBM, Lazio Innova, Sapienza, SheTech. Thanks must be given to Tiziana Catarci, and Paola Velardi both of Sapienza, University of Rome, Italy for their chairing of the event and the successful fundraising.

The work of steering and overseeing the event has been carried out by a working group of the ACM-W Europe. The ACM-W Europe womENCourage Steering Committee is chaired by Bev Bachmayer. The steering Committee members are: Beverly Bachmayer, Nuria Castles, Adriana Wilde, Monica Nugent and Rukiye Atlan. The steering committee have refined their processes to include earlier expression of interest requests for hosting future womENCourage events. To this end the steering committee are not only overseeing the 2020 celebration in Azerbaijan, they are also working on applications for the 2021 and 2022 events. This will aid the sustainability of womENCourage and will ensure that appropriate planning and communications can occur aiding the success of each individual event.

**ACM-W Chapters in Europe.** Thanks to the hard work by Maria Ribera-Sanchos, the ACM-W Europe Chapters Chair, and Virginia Grande, the ACM-W Europe Celebrations Chair, there are now 10 ACM-W Professional Chapters and 6 ACM-W Student Chapters in Europe. A working group has been established to set up advice and supports for ACM-W Europe chapters. The working group is collaborating directly with George Eleftherakis, Chair of the CECL Europe, in this matter.

**ACM-W Celebrations in Europe.** Virginia Grande, Chair of the ACM-W Celebrations in Europe has established a team to review the celebrations in Europe and to focus on required supports. Amani Boughalmi worked with Virginia Grande to carry out a review of the current level of engagement of ACM-W Europe chapters. During 2019-2020, 6 of the total 16 ACM Celebrations of Women in Computing were organized in Europe [<https://women.acm.org/2019-2020-celebrations/#more-4666>]:

ACM-W UK Inspire 2019	Kent, UK	September 9, 2019,
womENCourage 2019	Rome, Italy	September 16-18, 2019
ACM-W UK Inspire 2020	University of York, UK	March, 2020
ACWIC	Ankara, Turkey	March, 2020
IPT	Valencia, Spain	April 24 – 25, 2020
ENTER: ACM Celebration of Women in Computing	Belgrade, Serbia	April 2020

**Organizing Virtual Events for wider outreach.** Virginia and Amani are working on support structures for virtual events for chapters for the future months.

**European Volunteer Network.** The European Volunteer Network is organised by the EVN working group, chaired by Lipika Deka. The group has updated the process for inviting volunteers to work as part of our Volunteer network. Their work will aid us in reaching countries that we do not currently have regional chapters. The volunteers will also work to represent the ACM-W Europe at conferences by distributing materials or organising panels where possible. At present, the EVN is working to highlight the skill set and technical fields of women in computing by creating a series of short videos. In this way, we can highlight areas in which women are currently underrepresented. This works towards establishing visible role models for future generations.

**Communications.** The communications working group, chaired by Sigdem Sengul, aims at providing a clear and sustainable structure for communications with our members and the members at large. ACM-WE reached out to ACM Members in Europe via:

1. Blog: In August 2019, moved to the main website <https://acmweurope.acm.org/blog>; Running a Reflections on womENCourage blog series, as well as invited posts, e.g., posts from womENCourage 2019 workshop organizers that matched the November/December social media theme of Gender and AI Ethics.
2. ACM-W Europe Website [<https://acmweurope.acm.org>]. Alexandra Dediu and Cigdem Sengul are revamping the website to create a cleaner site ACM-W Europe monthly newsletter (<http://europe.acm.org/acm-w-europe-newsletter-archives.html>). Cigdem Sengul set out a yearly planner with structured topics for the monthly newsletter. This year, it includes a new section called 'Diversity Heroes' to aid focus on BlackLivesMatter and to highlight other minority groups to aid in the diversity of the ACM-W Europe. In addition the new strategy includes an article each month from womENCourage scholarship awardees. The newsletter ends each month with a list of conferences and awards to encourage our members to contribute to the ACM activities.
3. Blog. Social media is currently coordinated by Bedour Alshaigy (coordinator). Social media outlets include:
  - a. Twitter (<https://twitter.com/ACMWomENCourage>) with 1,127 followers
  - b. Facebook (<https://www.facebook.com/womencourage/?fref=ts>) with 1,167 followers
  - c. LinkedIn (<https://www.linkedin.com/groups/5138577>) The company page can be found here: <https://www.linkedin.com/company/acm-w-europe/>
4. Wikipedia. The lack of role models for young women in computing is shocking. In March, to celebrate International Women's day and in order to combat this situation, the communications working group contributed to English Wikipedia with articles about women that are in computing, and from as many European countries as possible. Wikipedia require strict criteria on whom they deem appropriate in order to ratify a page. To date, pages has been successfully created for:
  - ACM-WE is delighted that the first entry that was accepted to be created was for Sihem Amer-Yahia.
  - Dita Příkrylová, the co-founder of Czechitas is now on Wikipedia.
  - Ingrid Verbauwhede is a Professor at the COSIC (Computer Security and Industrial Cryptography) Research Group of the Electrical Engineering Department, KU Leuven, Belgium.
  - Prof. Verbauwhede is a pioneer in the field of secure embedded circuits and systems.

**Friends & Other Collaborative Work.** The ACM-W Europe continue to work with Informatics Europe WIRE and have established monthly meetings to work on topics of shared interest. We have also renewed our links with Women in HPC who collaborated strongly on a previous womENCourage event. We are working on establishing better links with WITS and other groups. We have also set out a process to review requests for collaboration to ensure that we work towards the ACM and ACM-W goals.

### Future Plans

The ACM-W Europe will not only continue to work towards the goals but will also increase the impact of its activities through the extension of the working groups to include further volunteers.

- Increase diversity in our working group when expanding the volunteer members.
- Work on increasing the visibility of women in computing through our blog, video series, Wikipedia.
- Work more closely with our ACM-W chapters to ensure continuity from year to year.

## ACM Europe Fellows WorkGroup (Report by Anastasia Ailamaki)

### Membership

**Anastasia Ailamaki**, EPFL, CH (*chair*)

**Serge Abiteboul**, Inria & ENS, FR

**Hagit Attiya**, Technion-Israel Institute of Technology, IL

**Luca Benini**, ETHZ, CH

**Elena Ferrari**, University of Insubria, IT,

**Georg Gottlob**, University of Oxford, UK

**Pablo Rodriguez Rodriguez**, Telefonica Research and Alpha, ES

**Per Stenström**, Chalmers University of Technology, SE

**Reinhard Wilhelm**, Saarland University, DE

The ACM Europe Fellows WorkGroup is a newly established working group of the ACM Europe Council. Its mission is to ensure the elevation of excellent European ACM members to the ACM fellow and Distinguished Member grades. The candidates will be awarded for their outstanding achievements in computer-related science and technology.

The workgroup is comprised of 9 well-established European Researchers, all ACM Fellows, that have been carefully selected to guarantee, as a group, wide scientific and geographical coverage. In particular, the Workgroup's members are located in eight different countries in Europe and their expertise covers a wide spectrum of scientific areas: Hardware Aware Data Management, Real-Time Intelligent Data Systems, Database theory, Finite model theory, Distributed and Concurrent Computing, Computer Architectures, Embedded Systems, Security, Privacy and Trust in IoT, Blockchain, Security and Privacy for BigData, Networking, High-performance Computer Architecture, Timing Analysis for Real-Time Systems, Compiler Construction.

The main tasks of the workgroup can be summarized as follows:

- To identify eligible potential candidates.
- To maintain an updated list of potential candidate/nominator pairs.
- To establish contact with proposed nominators of approved candidates in a timely manner.
- To overall manage the nomination process.

### Activity

In October 2019, Anastasia Ailamaki accepted to chair the Workgroup. By January 2020, all members of the Workgroup have been recruited. The first-year focus of the Workgroup has been to increase the number of renowned European Researchers nominated for the ACM Fellow grade. Their progress until the end of the reporting period includes the creation of a list of around eight confirmed candidate/nominator pairs for the September 2020 ACM Fellows call. The Workgroup holds regular bimonthly meetings.

### Future Planning

Once the appropriate procedures for increasing the number of nominations for the ACM Fellows grade will have been established and stabilized, the focus of the Workgroup will be put on increasing the number of nominations of European researchers for the ACM Distinguished Member grade.

A longer-term and more ambitious goal is to change the culture toward encouraging people worldwide to think about nominations.

### 3<sup>rd</sup> Summer School on Data Science, Athens, Greece, July 2019 (Yannis Ioannidis)

With its 3<sup>rd</sup> successful edition in 2019, the ACM Europe Summer School on Data Science is now established as a reference educational event in the field in Europe, building up a reputation among students based on the excellent quality of its lecturers and its overall program.

The Summer School took place in Athens, Greece, in July 2019. Fifty-five young computer science researchers and engineers, postdocs, PhD candidates, MSc and BSc students (with 18 women among them), arrived in Athens from several countries for an intense week of lectures, hands-on sessions and keynote talks from distinguished scientists.



Figure 4 : 3<sup>rd</sup> ACM Summer School on Data Science, held in Athens, Greece in July 2019.

The summer school covered the following subjects: Data and Algorithmic Bias in the Web, Online social networks and media, Challenges for Visual Analytics in Data Science, Data integration, CNNs, Fairness, and Privacy in the Context of Urban Data, Mining Structured Knowledge from Massive Text Data: A Data-Driven Approach, and Ethics of Data Driven Innovation. The overall schedule of the Summer School appears in *Figure 7*.

The Summer School was jointly organized by ACM, the ACM Europe Council, “Athena” Research & Innovation Center, and the National & Kapodistrian University of Athens. Chairs of the School were Minos Garofalakis and Yannis Ioannidis. The Program Committee was completed by George Eleftherakis, Panagiota Fatourou, Chris Hankin, and Pat Ryan. ACM and ACM Europe leaders as well as experts from the scientific community also significantly contributed to the School’s scientific setup.

The School was sponsored by ACM (through the surplus of the 2018 School), ACM SIGMOD, ACM SIGKDD, ACM SIGIR, Microsoft, “Athena” Research & Innovation Center, and the National & Kapodistrian University of Athens. These sponsorships complemented the income coming from student fees and allowed the 2019 School to offer the best possible environment and services for students and speakers.

All details about the Summer School are available at [summerschool.acm.org/2019](https://summerschool.acm.org/2019). All lecture material, including videos, is available via the ACM Digital Library. Photos are available at <https://flic.kr/s/aHsmFtEjMq>.

Thursday 11/7	Friday 12/7	Saturday 13/7	Sunday 14/7	Monday 15/7	Tuesday 16/7	Wednesday 17/7	
Evi Pitoura	Ricardo Baeza-Yates	J. J. van Wijk		Bill Howe	Jiawei Han	Natasa Milic-Frayling	
08:30-09:00 Welcome			Free Day				
09:00-10:30 Lecture	08:30-10:00 Lecture	09:00-10:30 Lecture		08:30-10:00 Lecture	08:30-10:00 Lecture	08:30-10:00 Lecture	
	10:00-10:30 Break			10:00-10:30 Break	10:00-10:30 Break	10:00-10:30 Break	
10:30-11:00 Break		10:30-11:00 Break					
11:00-12:30 Lecture	10:30-12:00 Lecture	11:00-12:30 Lecture			10:30-12:00 Lecture	10:30-12:00 Lecture	10:30-12:00 Lecture
	12:00-13:00 Keynote talk Constantinos Daskalakis	12:30-13:30 ACM-WE Georgia Koutrika Maria Roussou			12:00-13:00 Lunch	12:00-13:00 Lunch	12:00-13:00 Lunch
12:30-13:30 Lunch	13:00-14:00 Lunch	13:30-14:30 Lunch			13:00-14:30 Lecture / Hands- on	13:00-14:30 Lecture / Hands- on	13:00-14:30 Lecture / Hands- on
13:30-15:00 Lecture / Hands- on	14:00-15:30 Lecture / Hands- on	14:30-16:00 Lecture / Hands- on			14:30-15:00 Break	14:30-15:00 Break	14:30-15:00 Break
15:00-15:30 Break	15:30-16:00 Break	16:00-16:30 Break			15:00-16:30 Hands-on	15:00-16:30 Hands-on	15:00-16:30 Hands-on
15:30-17:00 Hands-on	16:00-17:30 Hands-on	16:30-18:00 Hands-on					
					17:00-18:30 Sweet or Spicy?		16:30-18:00 Closing Ceremony
	18:30-20:00 Acropolis Museum	Free Evening				17:00-22:30 Beach Party @Bolivar Beach Bar	
19:30-21:30 Welcome Reception	20:00-22:30 Dinner @ AM				Free Evening		

Figure 5: Overall Schedule of 3<sup>rd</sup> ACM Summer School on Data Sciences

## 1<sup>st</sup> Summer School on HPC Computer Architectures for AI and Dedicated Applications, Barcelona, Spain, July 2019 (Fabrizio Gagliardi)

The 2019 ACM Europe Summer School on “HPC Computer Architectures for AI and Dedicated Applications” took place in Barcelona 17 - 24 July 2019, and was hosted by the Barcelona Supercomputing Center (BSC-CNS) and the Universitat Politècnica de Catalunya (UPC-BarcelonaTECH). ACM's Special Interest Group on High Performance Computing (SIGHPC), devoted exclusively to the needs of students, faculty, researchers, and practitioners in high performance computing, was the primary sponsor of the school.



Figure 6: 1<sup>st</sup> ACM Summer School on HPC Computer Architectures for AI and Dedicated Applications, held in Barcelona, Spain, in July 2019.

Lenovo-Intel and Fujitsu were the industrial sponsors of the school.

The summer school addressed young computer science researchers and engineers, and it was open to outstanding MSc students and senior undergraduate students. Sixty-four students were chosen to attend the school, among which there were twelve female students (almost 20% of the total). There were several nationalities present among the students: Bangladesh, Brazil, Bulgaria, China, Colombia, France, Germany, Greece, India, Iran, Italy, Mexico, Norway, Poland, Russia, Slovenia, Spain, South Korea, Sweden, Thailand, Turkey, UK, Ukraine, United States and Vietnam.

Accepted participants spent a full week in Barcelona, attending formal lectures during the mornings and practical exercises in the afternoons. The full program of the Summer School appears in *Figure 7*. Among many interesting activities and talks, the summer school featured a lecture Prof. Silvio Micali, MIT Professor and Turing Award laureate. It also included lectures on the following topics: data analytics in HPC, machine learning accelerators -- from cloud to edge, cache and memory compression techniques, energy efficient approaches in ML Architecture, the convergence between supercomputers and IoT nodes, hybrid task-based programming in the HPC domain, scheduling policies and performance models for disaggregated architectures, and several other side events.

Chairs of the school were Prof. Mateo Valero (Director of the Barcelona Supercomputing Center, ACM – IEEE CS Eckert-Mauchly Award recipient, ACM Fellow, and ERC grantee) and Prof. Josep Fernandez (CS Dean, Facultat d'Informàtica de Barcelona, UPC). The local organizing committee was led by Prof. Eduard Ayguadé (BSC and UPC) and Dr. Fabrizio Gagliardi (BSC and ACM). Other members of the organizing committee were Prof. María Ribera Sancho (BSC and UPC), Tamara Kovazh (BSC) and Amalia Hafner (BSC consultant).

The evaluation of the summer school was very positive, both from the organizers and lecturers' point of view, as well as from the students' perspective. More information is provided at <https://europe.acm.org/2019-acm-europe-summer-school>

	Wednesday 17th	Thursday 18th	Friday 19th	Saturday 20th	Sunday 21st	Monday 22nd	Tuesday 23rd	Wednesday 24th	
8:00		Breakfast @ Vertes	Breakfast @ Vertes	Breakfast @ Vertes		Breakfast @ Vertes	Breakfast @ Vertes	Breakfast @ Vertes	8:00
8:30									8:30
9:00		Energy efficient approach in ML architecture (Uri Weiser)	Cache and Memory Compression Techniques (Per Stenstrom)	Machine Learning Accelerators - From Cloud to Edge (Luca Benini & Francesco Conti)	Breakfast @ Vertes	Practical Approaches to Data Analytics in High Performance Computing (Michela Taufer)	The convergence between supercomputers and IoT Nodes: design concepts and their application (Mauro Olivieri)	Scheduling Policies and Performance Models for Disaggregated Architectures (David Carrera)	9:00
9:30	9:30								
10:00	10:00								
10:30	10:30								
11:00	11:00								
11:30								11:30	
12:00									12:00
12:30									12:30
13:00		Lunch @ Sala Agora	Lunch @ Sala Agora	Lunch @ Sala Agora		Lunch @ Sala Agora	Lunch @ Sala Agora	Lunch @ Sala Agora	13:00
13:30	13:30								
14:00									14:00
14:30	EPI Tutorial	Energy efficient approach in ML architecture (Uri Weiser)	Cache and Memory Compression Techniques (Per Stenstrom)	Machine Learning Accelerators - From Cloud to Edge (Luca Benini & Francesco Conti)		Hybrid task based programming in the HPC domain (Jesús Labarta)	The convergence between supercomputers and IoT Nodes: design concepts and their application (Mauro Olivieri)	Scheduling Policies and Performance Models for Disaggregated Architectures (David Carrera)	14:30
15:00								15:00	
15:30								15:30	
16:00								16:00	
16:30								16:30	
17:00							Session on EU Programmes by Francesca Ancara	Special session on Inter-disciplinary Research & Diversity: Challenges and Foundations of HPC Success	17:00
17:30	Registration			ACM Being-Human with Algorithms initiative by Gerhard Schimpf				Industry Presentations	17:30
18:00									18:00
18:30	Welcome by Josep Fernandez & Mateo Valero and Introduction by Eduard Ayguadé & Fabrizio Gagliardi			Turing lecture by Silvio Micali					18:30
19:00	Computer Architecture: Past, Present and Future by Mateo Valero							Closing of the school and awards	19:00
19:30	Group picture			Reception					19:30
20:00	Welcome cocktail	Dinner @ Vertes	Dinner @ Vertes	Dinner @ Vertes		Dinner @ Vertes	Dinner @ Vertes		20:00
20:30					Group Dinner @ Negro / Rojo			Farewell dinner	20:30
21:00									21:00

Figure 7: Agenda of ACM Summer School on HPC Architectures for AI and Dedicated Applications, July 2019.

## Best Paper Awards at Conferences

The ACM Europe Council Best Paper Awards recognize authors of outstanding technical contributions to ACM conferences taking place in Europe. The award acknowledges groundbreaking research in each conference's respective field for its importance and contribution to the area, to highlight theoretical and practical innovations that are likely to shape the future of computing both in Europe and worldwide.

Each of the winners receives a plaque. In addition, there is a 1000 Euro honorarium to be split among the winners. Moreover, the recipient's paper will be provided online through the ACM Europe Council Awards page. The award is presented during the award ceremony at the conference by an ACM Europe Council member attending the conference, or by a party designated by the Council.

During the reporting period, the ACM Europe Council gave the six awards listed below:

1. 25th Annual International Conference on Intelligent User Interfaces (IUI), Cagliari, Italy (held virtually), March 2020. The ACM Europe Council Best Paper Award was awarded to Zana Bućinca, Phoebe Lin, Krzysztof Z. Gajos, and Elena L. Glassman of Harvard University for their paper, [Proxy Tasks and Subjective Measures Can Be Misleading in Evaluating XAI Systems](#).
2. 16th ACM SIGGRAPH European Conference on Visual Media Production (CVMP), London, UK, December 2019. The ACM Europe Council Best Paper Award was awarded to Wieland Morgenstern, Anna Hilsmann, and Peter Eisert of Fraunhofer Heinrich Hertz Institute for their paper [Progressive Non-rigid Registration of Temporal Mesh Sequences](#).
 
3. 13<sup>th</sup> ACM Conference on Recommender Systems (RecSys), Copenhagen, Denmark, September 2019. The ACM Europe Council Best Paper Award was awarded to Maurizio Ferrari Dacrema, Paolo Cremonesi (Politecnico di Milano) and Dietmar Jannach (University of Klagenfurt) for their paper [Are we really making much progress? A worrying analysis of recent neural recommendation approaches](#).
 
4. 11th ACM SIGCHI International ACM Conference on Automotive User Interfaces and Interactive Vehicular Applications (Automotive UI), Utrecht, The Netherlands, September 2019. The ACM Europe Council Best Paper Award was awarded to Marcel Walch, Marcel Woide, Kristin Mühl, Martin Baumann, and Michael Weber (Ulm University) for their paper [Cooperative Overtaking: Overcoming Automated Vehicles' Obstructed Sensor Range via Driver Help](#).
 

5. 24<sup>th</sup> Annual Conference on Innovation and Technology in Computer Science Education (ITiCSE), Aberdeen, Scotland, July 2019. The ACM Europe Council Best Paper Award was awarded to Quintin Cutts, Matthew Barr, Mireilla Bikanga Ada, Peter Donaldson, Steve Draper, Jack Parkinson, Jeremy Singer and Lovisa Sundin of the University of Glasgow, Glasgow, UK for their paper [Experience Report: Thinkathon—Countering an "I Got It Working" Mentality with Pencil-and-Paper Exercises.](#)
6. 20th ACM International Symposium on Mobile Ad Hoc Networking and Computing (MobiHoc), Catania, Italy, July 2019. The ACM Europe Council Best Paper Award was awarded to Giulia Fanti (CMU); Jiantao Jiao (UC Berkeley); and Ashok Makkuva, Sewoong Oh, Ranvir Rana, and Pramod Viswanath (UIUC) for their paper [Barracuda: Theoretical Analysis of the Power of I-polling in Proof-of-Stake Blockchains.](#)

