WiCV at ECCV2018: The Fifth Women in Computer Vision Workshop

Zeynep Akata[1,2], Dena Bazazian[3], Yana Hasson[4], Angjoo Kanazawa[5], Hildegard Kuehne[6], Gül Varol[4]

University of Amsterdam, Amsterdam, Netherlands[1],
Max Planck Institute, Saarbrücken, Germany[2],
Computer Vision Center (CVC), Barcelona, Spain[3],
dena.bazazian@cvc.uab.es
Inria, Paris, France[4],
UC Berkeley, Berkeley, USA[5],
University of Bonn, Bonn, Germany[6]

https://wicvworkshop.github.io/ECCV2018

Abstract. We report a summary of the Women in Computer Vision Workshop (WiCV) at ECCV 2018. WiCV focuses on creating a more inclusive environment for women researchers, a minority in the currently male dominated field of Computer Vision. In fact, despite the incredible progress of computer vision and machine learning and the growing interest towards these topics, the amount of female researchers is still limited both in academia and industry. The workshop is therefore an opportunity to promote collaborations, increase visibility and inclusion, and provide mentoring. Moreover the workshop offers a venue to discuss gender related biases still present throughout the work environments and are often not discussed with the due importance. This was the fifth WiCV workshop in its fourth year, and also the first WiCV held in Europe, in conjunction with ECCV. We have made changes in our program according to lessons learned from previous workshops and were able to obtain an unprecedented attendance exceeding the room capacity. We report a summary of statistics for presenters and attendees, followed by expectations for future iterations of the workshop.

1 Introduction

The fifth 'Women in Computer Vision' workshop was organized for the first time in conjunction with ECCV, extending the successful 'Women in Computer Vision' series at CVPR. The idea behind bringing WiCV to ECCV was to make it easier for female researchers from Europe, Asia and Middle east to attend the event.

Whereas themes like female inclusion in work environments and equal opportunities beyond gender are getting increasing attention, certain fields are still poorly populated by females. This also holds for the field of computer science and in particular of computer vision and machine learning, which has become

one of its largest research communities. Not even the tremendous progress in the past years over a broad range of areas such as object recognition, video analysis, 3D reconstruction and autonomous driving has helped to reduce the disparity between males and females in the field, both in academia and industry. This leads to isolation of many female computer vision researchers, who end up working in an unbalanced work environment.

While this problem is commonly experienced by females, most of the community is not even aware of it. Yet issues are not limited to this. In the previous editions of the workshop [1], important topics have been raised such as *unconscious bias*, where men unwillingly tend to undervalue females i.e. in grading or job interviews. For this reason, the workshop on Women in Computer Vision is a gathering for both men and women working in computer vision, targeting a broad and diverse audience of researchers in academia and industry, including graduate students pursuing doctoral studies, masters or undergraduates.

This workshop is envisioned as a unique opportunity to raise awareness on the problems of the female community and help inclusion and visibility of female computer vision researchers at all levels, seeking to serve women from universities, research programs and backgrounds from all around the world.

To reach the goals of inclusion and opportunity for female researchers, a series of events has been organized throughout the workshop. First of all, female researchers were encouraged to submit a contribution to be presented in the conference venue and therefore spread their work with the community. The papers were peer reviewed and a selection of the best papers was presented in an oral session. All accepted papers were further presented in a poster session. Paper submission required a four page manuscript on a novel or recently published work authored by at least one researcher identifying as female. In particular, works from junior graduates students were encouraged in order to allow them to get acquainted with the community and look for career opportunities such as collaborations or internships while gathering feedback and suggestions about their work. As workshop is not focused on any specific computer vision topic and, on the contrary, strives for diversity, the selected papers give a cross-sectional overview of current research topics.

Moreover, female presenters of accepted papers were encouraged to apply for a travel award in order to ease and encourage their participation and, following the trend of the previous edition, choose whether or not to appear in the workshop proceedings. Along the travel awards, an additional prize has been awarded, by donating two Nvidia GPUs to randomly selected female participants.

In addition to the presentations, the workshop features a series of keynotes from well-known female computer vision researchers. The most important aspect of these lectures is to showcase work of senior female researchers in general, but also as potential role-models and as a form of inspiration for young researchers. Newcomers can find a neutral ground to collaborate and follow the steps of the speakers in their career paths. The workshop also included a panel, where the topics of inclusion and diversity were discussed in an open and friendly environment between female and male colleagues.

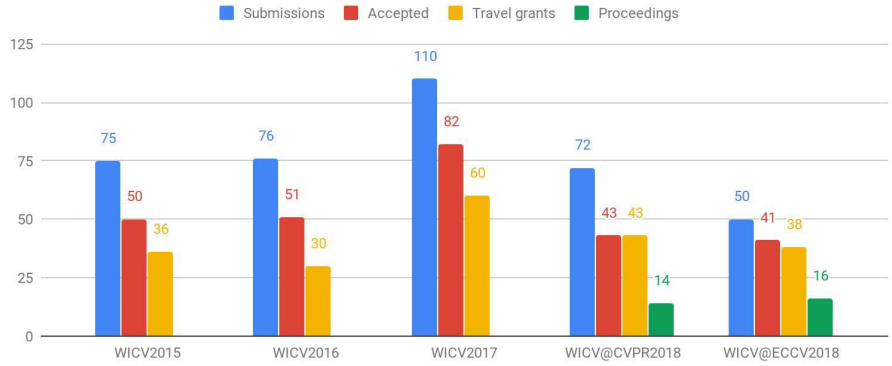

Fig. 1. WiCV Submissions. The number of submissions over the past years of WiCV.

Another high-level goal of the workshop is to maintain and grow the WiCV network, where female students and professionals share experiences and career advice. A mentoring banquet has been organized to provide a safe and casual environment for those relationships to be seeded in the workshop and possibly become ongoing mentorships or collaborations in the future. The dinner sets an informal environment in which junior women can meet, exchange ideas, and form beneficial relationships with senior faculty and researchers of all genders in the field.

2 Workshop Statistics

In comparison with the previous edition of WiCV [1], for this workshop we had 50 high quality submissions from a diverse range of topics and institutions. The most popular topics were object recognition and detection, applications of computer vision, and machine learning approaches. The comparison with previous years is presented in Figure 1. Overall the number of submission was a bit lower than for previous CVPR events. One of the reasons here might be that ECCV in general hosts less attendees than CVPR and that the workshop was the first in context of this conference series.

As in the previous WiCV edition at CVPR 2018, the workshop organization has been able to provide travel grants for all the authors of accepted submissions who applied for a travel stipend. This was possible thanks to sponsor donations that have been used to cover the grants and the expenses for the mentorship banquet, workshop bags and promotional materials, in addition to some travel support for keynotes and organizers. Sponsorship amounts are depicted in Figure 2.

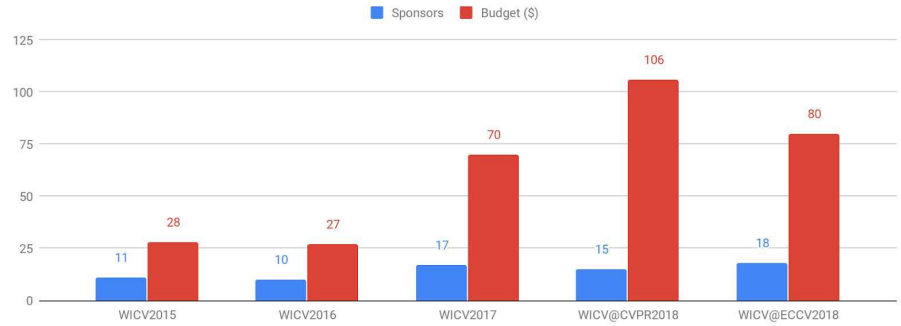

Fig. 2. WiCV Sponsors. The progression of number of sponsors and the amount of sponsorships for WiCV.

3 Workshop Program

The program of the workshop was prepared to include three keynotes, five oral presentations, 40 poster presentations, and a panel discussion. After testing the full-day format at CVPR 2018, the workshop was brought back to the half day format which better condenses the events and stimulates a more active engagement with the participants.

Overall, the WiCV workshop at ECCV 2018 offered three tracks, consisting of three keynotes, two oral sessions featuring five high quality publications and a poster session providing a platform for young researchers to show their work to a broader audience.

For this edition of the workshop, three high profile researchers have been invited as keynote speakers:

- Tamara Berg (UNC Chapel Hill, Shopagon): *Vision and Language*
- Svetlana Lazebnik (University of Illinois at Urbana-Champaign): *Adapting Neural Networks to New Tasks*
- Kate Saenko (Boston University): *Explainable AI Models and Why We Need Them*

The speakers were selected to offer a diverse variety of expertise over different computer vision topics and for their important impact in their research fields. By diversifying the set of speakers, junior researchers are provided with potential role models with whom they can identify and who can help them envision their own career paths.

The workshop concluded with a one hour panel discussion on diversity. The panel was made up of the three female keynote speakers as well as two male researchers, Andrew Fitzgibbon (Microsoft HoloLens) and Jitendra Malik (UC Berkeley). A diverse range of subjects was addressed during the panel discussion with anonymous questions from the audience. Questions ranged from suggestions for specific situations, such as how one can encourage their male coworkers

in providing a safe working environment, to personal questions addressed to the panel about their biggest research mistakes in life. An important point arose following CVPR's publication of a code of conduct, as well as naming a conference ombud for reports about violations. The recommendation for ECCV to follow this example has been forwarded to ECCV 2020 organizers.

The workshop was followed by the WiCV banquet, where senior researchers were able to meet as mentors with mentees in a casual environment and gave them advice about career paths in research. The banquet begun with three talks by Megan Maher, Tinne Tuytelaars and Raquel Urtasun sharing their stories and experiences and giving constructive advice to young female researchers.

4 Conclusions

WiCV at ECCV 2018 has continued to increase awareness concerning the gender imbalance in the computer vision community, with the aim to overcome issues tied to exclusive workspaces or unfair impediments in female careers. To this end, the collective effort is tuned towards building an increasingly big and connected community of female researchers capable of providing the necessary support.

Given the high number of attendees (more than 100), with an elevated number of male participants of 40%, we believe that the workshop is making important steps in the right direction. To further increase the pace towards reaching the desired goals, the organizing committee of the workshop is also attempting to convert the structure of WiCV to a non-profit organization to be an autonomous entity for all related events and gatherings.

5 Acknowledgments

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References

1. Demir, I., Bazazian, D., Romero, A., Sharmanska, V., Tchapmi, L.: WiCV 2018: The Fourth Women In Computer Vision Workshop. In Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition Workshops (2018) 1860–1862