INTERNATIONAL PROGRAMS

APSA Partners with Zayed University in UAE to organize Workshop on Machine Learning for the Social Sciences

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Through the MENA Departmental Collaboration Initiative, APSA partners with political science and related departments at universities in the Arab World to design tailored programming that supports local faculty and graduate students. Projects aim to explore opportunities for program growth and foster excellence in the study, research, and teaching of political science. Since 2017, APSA has supported seventeen projects at six different institutions in the MENA region. Examples include trainings in research methodology and fieldwork, workshops to support MA students in completing a thesis, seminars to discuss teaching techniques and pedagogy, and lectures and resources for professional development and networking.

Last month, APSA was pleased to partner with the department of international affairs and social sciences (IASS) at Zayed University to organize a two-day training for faculty on machine learning (ML). Faculty at IASS who are qualitative-oriented researchers identified a need for quantitative analysis training in their department. Specifically, they expressed interest in learning the fundamentals of ML as a data analysis approach with an introduction to more advanced quantitative data analytics. Dr. Magdalena Karolak (ZU), a 2014 MENA Workshop alumna, spearheaded the organization of the workshop, which served as the first hands-on training in quantitative data analysis for department faculty.

> "I am indebted to APSA for offering us this opportunity to learn the latest ML techniques in political science research. Dr. Skyler was a fantastic trainer and I have a much better understanding of ML after the workshop and hope to implement it in my own research soon."
> —Workshop Attendee

Dr. Skyler Cranmer (Ohio State University) led the in-person workshop titled "A Basic Orientation to Machine Learning," which introduced ML fundamentals and tools, including some of its software and programming languages. ML algorithms were introduced conceptually, so advanced knowledge of programming languages and software such as R and Python were not required. Using case studies from the social sciences and participants' work, Dr. Cranmer demonstrated how ML could be used to help make accurate predictions in research. The training content was delivered in separate modules: inference and prediction, notation/concept basics, supervised regression, supervised

> "Skyler was an excellent teacher. The sessions were very clearly organized into separate modules and he explained all the concepts and processes in a very logical way with a range of concrete examples. I know now much more about machine learning and how it can be used in quantitative-based research"
> —Dr. Michael Bowles, workshop attendee

classification, deep learning, unsupervised clustering, and Ethics in ML. Dr. Cranmer tailored the training so faculty could identify what technique would be most suitable for their research question and data and how to design, test, and interpret their models.

Fifteen faculty members attended the training, which took place at the university's Dubai campus, with additional faculty members joining virtually from the Abu Dhabi campus. While most participants were from IASS, some language studies department and Islamic studies faculty members also attended the workshop. This is the second departmental collaboration with the university; in 2018, APSA supported faculty from the social science department at the College of Humanities and Social Science (CHSS) to organize four workshops for faculty and MA students on teaching research methods.

Funded by Carnegie Corporation of New York, APSA's Mena Program is a multiyear effort to support political science research and

Above: Dr. Skyler Cranmer (far left) with workshop attendees at Zayed University.

networking among early-career scholars across the Arab MENA region. For program news, updates, and additional information, visit the project website: http://web.apsanet.org/mena/. ∎