Kevin Y.X. Wang

Statistician and Data Scientist

Profile

Kevin is a research associate with a PhD in statistics from the University of Sydney in Australia. His main interest lies in the use of statistics and data science to uncover expected patterns in data to ultimately inform decision making. In his current role, his work focuses on statistical modelling of complex biological data and he provides consultations and analytical insights in various scientific fields. However, his specialisation in predictive modelling and applied statistical computation are applied broadly for data under any context. Kevin is a passionate and innovative data scientist and he loves talking with domain experts over whatever data problems they have on hand. His strong communication skills have been awarded with numerous prizes and scholarships throughout his career.

Experience

2019–2020 **Research Associate**, *University of Sydney*.

- Developed a clinically implementable prediction model using genomics data with clinicians and biologists.
- o Developed and maintained open-sourced R software packages.
- Designed and hosted cloud-based workshops.

2016–2019 **Postgraduate Teaching Fellow**, *University of Sydney*.

- Authored lecturing materials for courses at both undergraduate and postgraduate level with strong positive student feedback.
- Delivered lectures (200+ students) and tutorials, covering 15 different courses, including statistics, mathematics and data science.
- Mentored and trained new statistics tutors.
- 2016 **Summer Research Scholar in Bioinformatics**, *Charles Perkins Centre*. Research in data visualisation, focus on gene interaction networks for cancers (3 months)
- 2015 **Summer Research Scholar in Mathematical Statistics**, *Australian National University*. Research in statistics, particularly on model selection and averaging techniques (3 months)
- 2013 **Research Internship in Mathematical Biology**, *Winston Charitable Foundation*. Research in mathematical modelling in the spread of infectious parasites in beehives (2 months)

Education

2016–2020 **Doctor of Philosophy in Science**, *University of Sydney*.

- Research in statistics and bioinformatics.
- The PhD thesis develops methods to enable prediction of patient clinical outcomes using omics data under a rigorous statistical framework.

2012-2015 Bachelor of Science (Adv. Mathematics) (Hon. I), University of Sydney.

- Major in statistics and financial mathematics.
- The Honours thesis examines the effect of different measures of association in human brain connectivity modelling utilising functional MRI data.

Skills

- Applied Highly experienced at the research level. Specialisation in predictive modelling. statistics
- R & git Highly proficient in scripting, tidyverse, shiny and package development with unit testing, continuous integration and coverage testing.
- docker & Proficient in building docker images and deployment through Google Cloud. Google Cloud
 - python & Working knowledge in writing basic scripts. ${\tt SQL}$

Volunteering

- 2016-2019 **Outreach volunteer**, *University of Sydney*.
 - Delivered seminars and hands-on workshops for visiting high school and university students.
 - 2017 **President**, Sydney University Mathematics Society.

 Oversaw finances of the Society, organised academic/industry events and and negotiated coporate sponsorships for three years.
 - 2015 **President**, *Sydney University Statistics Society*.

 Organised academic/industry events and and negotiating coporate sponsorships.

Awards

- 2019 **Statistical Society of Australia**, JB Douglas Award (joint runner-up). Prize awarded to the top statistics reseach PhD students in New South Wales. AUD 250.
- 2019 **Statistical Society of Australia**, Golden Jubilee Travel Grant. Competitive funding for a statistics PhD student in Australia. AUD 1,000.
- 2018 **Sydney Bioinformatics Research Symposium**, Best poster student presentation at the conference. AUD 50.
- 2017 **International Biometric Society Australasian Region**, Best student talk at the conference. AUD 500.
- 2017 & 2018 Australian Bioinformatics & Computational Biology Society, Travel scholarship to ABACBS annual conference. AUD 250.
 - 2016-2019 **Australian Postgraduate Award**, For the duration of PhD program at the University of Sydney. AUD 26,288 p.a.
 - 2015 **International Biometric Society Australasian Region**, Awarded to the top biostatistics student undertaking a Honours program. AUD 1,500.