Kevin YX Wang

Statistician and Data Scientist

Passionate data scientist with a PhD in statistics and a proven track record of delivering valuable analytical insights. I am a highly effective communicator with numerous awards for research presentations and worked as a part-time lecturer at the University of Sydney. I am highly skilled in developing machine learning predictive models using the R language.

Education

2016–2019 **Doctor of Philosophy in Science**, *University of Sydney*.

- Research in statistics and bioinformatics.
- The PhD thesis mainly develops methods to enable prediction of patient clinical outcomes using genomics 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.

Experience

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

- Developed a clinically implementable prediction model using genomics data.
- o Provided analytical insights about genomics data to clinicians and biologists.
- 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.

Skills

Technical

R Highly proficient in writing research level scripts. Professional in using tidyverse and shiny. Author of the scMerge Bioconductor package as well as the APES and mcvis packages.

Applied Highly experienced at the research level. Specialisation in regression-type problems. statistics Publications in top journals, including *Bioinformatics*, *Clinical Cancer Research* and *PNAS*.

- git Highly proficient. Experiences in R package development with unit testing, continuous integration and coverage testing.
- docker Proficient in building docker images and deployment through Google Cloud.
- python Working knowledge in writing basic scripts. Released the mcvispy package.

Communication

- Consulting I have collaborated with researchers from different scientific fields and provided important analytical insights. These work eventually lead to publications in peer-reviewed journals.
- Workshop I have designed and delivered workshops for both industry and academic professionals on statistics and R. These workshops are about 30+ attendees in size and I received an Google Cloud for Education grant worth of 2,000 AUD.
- Mentoring I have mentored and trained statistics tutors at USYD and supervised an overseas student on a statistics project.

Volunteering

- 2016-Present **Outreach volunteer**, *University of Sydney*.
 - Deliverying seminars and hands-on workshops for high school and university students.
 - Previously a board member of the School Outreach committee.
 - 2017 **President**, Sydney University Mathematics Society.
 - Oversee finances of the Society and negotiating coporate sponsorships.
 - Organising speakers for industry and academic seminars and social events.
 - Management of social media accounts, operations and sales of merchanise.
 - 2014-2015 **President**, Sydney University Statistics Society.
 - Established the Statistics Society in 2014. Responsible for all social and career events during 2015, including an industry workshop with SAS.

Internships

- 2016 Charles Perkins Centre Summer Research Scholarship in Bioinformatics, *University of Sydney.*
 - A Shiny implementation for differential variability analysis via a network approach. Supervised by Prof. Jean Yang and Prof. Graham Mann.
- 2015 Summer Research Scholarship in Mathematical Statistics, Australian National University.
 - Frequentist model selection and model averaging techniques. Supervised by Prof. Alan Welsh.
- 2013 Winston Charitable Foundation Internship in Mathematical Biology, *University of Sydney*.
 - Spread of the Varroa Mite among different castes of honey bee hives. Supervised by Prof. Mary R Myerscough.

Honours and Awards

2019 **Statistical Society of Australia**, JB Douglas Award (runner-up). State-wide postgraduate student research presentation competition. AUD 250.

- 2019 **Statistical Society of Australia**, Golden Jubilee Travel Grant. Funding for international conference attendance in 2019. AUD 1,000.
- 2018 **Sydney Bioinformatics Research Symposium**, Best poster presentation. AUD 50.
- 2017 **International Biometric Society Australasian Region**, Best student talk. 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, Honours Scholarship for biostatistics students. AUD 1,500.