## Curriculum Vitae

#### Education

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

Identifying highly sensitive disease biomarkers for personalised medicine through novel statistical bioinformatics solutions. Supervised by Prof. Jean Yang, Prof. Samuel Müller and Dr. Garth Tarr.

2012-2015 **Bachelor of Science (Adv. Mathematics) (Hon. I)**, *University of Sydney*. Major in Statistics and Financial Mathematics.

Honours thesis: Biostatistics - Examination of appropriate measures of association to resting-state fMRI data. Supervised by Prof. Jean Yang and Dr. John Ormerod.

## Professional Experiences

#### 2016–Present **Postgraduate Teaching Fellow**, *University of Sydney*.

- Lecturer for MATH1005/1015, STAT3914/5002/5003.
- Key responsibilities: writing engaging and informative lecturing materials for courses at all undergraduate and postgraduate level; writing assessments; performing administrative tasks; providing consultation time for students and mentoring new tutors.
- Tutored 12 courses spanning across Pharmacy, Mathematics, Statistics and Machine Learning at undergraduatea and postgraduate level with strong positive student feedbacks.

#### 2013-2017 **Society President**, Sydney University Mathematics Society.

- Key responsibilities:
  - Oversee finances of the Society and negotiating coporate sponsorships.
  - Facilitating speakers for career and academic seminars.
  - Collaborations with other societies and organisations on social events.
  - Management of social media accounts, operations and sales.
- Hosting mathematical workshops and outreach activities relating Mathematics and Statistics for the Society and the University. Promoting mathematics to students with disadvantaged backgrounds.
- Previous positions held: Vice President, Treasurer and Social Director.

# 2016 Charles Perkins Centre Summer Research Scholarship in Bioinformatics, *University of Sydney*.

- Project summary: a Shiny implementation for differential variability analysis via a network approach.
- o Supervised by Prof. Jean Yang and Prof. Graham Mann.

- 2015 Summer Research Scholarship in Mathematical Statistics, *Australian National University*.
  - Research topic: Frequentist Model Selection and Model Averaging techniques.
  - Supervised by Prof. Alan Welsh.
  - o Participated in 3 Minutes Thesis competition in Burgmann College, ANU.
- 2014-2015 **Society President**, Sydney University Statistics Society.
  - Re-establishing the Statistics Society within the University of Sydney Union in 2014.
  - Responsible for registration and redrafting of the Constitution. Responsible for all social and career events during 2015.
  - April 2015: organising introductory SAS software workshop.
  - 2013 Winston Charitable Foundation Internship in Mathematical Biology, *University of Sydney*.
    - Project name: Spread of the Varroa Mite among different castes of the honey bee hive.
    - Supervised by Prof. Mary R Myerscough, University of Sydney.

#### Honours and Awards

- 2016-Present **Australian Postgraduate Award**, For duration of the PhD program at the University of Sydney. Valued at AUD 26,288 p.a.
  - 2017 **International Biometric Society in Australasian Region**, Best student talk at IBS-AR Conference. Valued at AUD 500.
  - 2017 **Australian Bioinformatics & Computational Biology Society**, *Travel scholar-ship to ABACBS annual conference. Valued at AUD 250.*
  - 2015 **International Biometric Society in Australasian Region**, Honours Scholarship for biostatistics students. Valued at AUD 1,500.

#### Publication

bcGST - an interactive bias-correction method to identify over-represented genesets in boutique arrays. Kevin YX Wang, et.al. 2018, bioRxiv 240234; doi: 10.1101/240234

## Computational skills

- R Fluent in writing research level scripts, including Rmarkdown and Shiny. Basic experience in developing packages. Designed and delivered workshops for students and industry professionals.
- LATEX Expert. Written extensive university materials using LATEX. Designed and delivered workshop for undergraduates.

Mathematica Working knowledge. Used it to assist research and teaching at the University level. MATLAB/Julia Working knowledge.

#### Miscellaneous

### Professional Society Memberships

- Statistical Society of Australia
- o International Biometric Society (Australasian Region)
- Royal Statistical Society
- Australian Bioinformatics & Computational Biology Society

#### **Attended Conferences**

- AMSI BioInfo Summer (2015)
- Sydney Bioinformatics Research Symposium (2016)
- Sydney Cancer Conference (2016)
- Aust. Bioinformatics & Computational Biology Society Conference (2016, 2017 poster)
- Australian Statistical Conference (2016 presentation)
- International Conference in Robust Statistics (2017 presentation)
- European Molecular Biology Laboratory PhD Course (2017)
- International Biometrics Society Australasian Region (2017 best student presentation)