JEFFREY ZIJIE YANG

Sydney NSW, Australia   jeffrey2999@gmail.com

EDUCATION

University of New South Wales   (February 2018 – December 2023)

Degree: Bachelor of Science (Advanced Mathematics)(Honours) and Bachelor of Science (Computer Science)
Majors: Pure Mathematics, Computer Science
Weighted Average Mark (WAM): 89.381 (High Distinction)

EXPERIENCE

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Data Science Intern   (Mar 2021 – Present)

- Used Python (Scikit-learn, Keras, Transformers) to work on various machine learning tasks within the domain of natural language processing.
- Used semantic matching to expand an internal phrase library for a scorecard and performed kept meeting prediction, politeness classification and caller sentiment classification based on call transcripts.

UNSW School of Computer Science and Engineering   **github.com/j3yang/dl-pa**

Research Intern   (Feb 2021 – Sep 2021)

- **Project**: Solver and Benchmarks for the Dynamic Logic of Propositional Assignments (DL-PA).
- Used C/C++ to implement a model checker for DL-PA. Parsing was done using Flex/Bison.
- Implemented parameterized random formula generation and solving functionalities.

CSIRO's Data61

Research Intern   (Dec 2020 – Feb 2021)

- **Project**: Exploring Deep Learning Methods for Document Representation in Biomedical Search.
- Used Python (SentenceTransformers) to construct/train a sentence embedding model, create a neural index, perform information retrieval and analyse results.
- Conducted experiments to investigate the effectiveness of neural indexing in information retrieval on biomedical literature (TREC 2019 Precision Medicine Track).

SKILLS

Languages: Python, C, C++, SQL
Tools: Python ML libraries, Git, Shell (Scripting, Make), Parser Generator (Flex/Bison), RDBMS (PostgreSQL)

VOLUNTEERING

UNSW Competitive Programming and Mathematics Society (CPMSoc)

President and Co-founder   (2021)

- Started the society to generate more interest in competitive programming/mathematics amongst students.
- Fostered relations with various entities for sponsorship and collaborations.
- Oversaw the development and execution of 9 mathematical problems solving workshops, 7 competitive programming workshops and 2 competitive programming competitions.

UNSW Mathematics Society (MathSoc)

Subcommittee Member   (2019-2020)

- Copresented a revision seminar for *MATH1081 (Discrete Mathematics)* and composed lab test solutions for *MATH1231/41 (Mathematics 1B)*.

AWARDS, SCHOLARSHIPS & ACHIEVEMENTS

2021 ICPC South Pacific Regional Finals - 4th Place	(2021)
2021 ICPC South Pacific Divisional Finals - 5th Place	(2021)
2020 ICPC South Pacific Regional Finals - 6th Place	(2020)
UNSW Taste of Research Scholarship	(2020)
CSIRO Undergraduate Vacation Scholarship	(2020)
UNSW Engineering Dean's Honours List (Highly Commended)	(2019, 2020)
The Faculty of Science Dean's List for Academic Excellence	(2018)