

KAI WONG

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OBJECTIVE:

Full-time summer internship to further develop my abilities in the field of computer science.

EDUCATION:

University of California Los Angeles, Los Angeles, CA

B.S. in Mathematics of Computation | Expected Graduation: Jun 2019 | GPA: 3.54

Selected Coursework (Computer Science):

Operating Systems Principles, Algorithms & Complexity, Computer Architecture, Object-Oriented Programming

Selected Coursework (Mathematics):

Probability Theory, Mathematical Analysis, Linear Algebra, Discrete Mathematics, Differential Equations

TECHNICAL SKILLS:

Programming: (Proficient) C/C++, Python, HTML/CSS (Familiar) Java, x86 Assembly, Solidity, Matlab

Environments & Tools: Git, Django, Emacs, Linux, Windows

SELECTED PROJECTS:

Algorithmic Trading Robot

Winter 2017 - Present

- Python-based automated trading program capable of collecting and plotting live market data, back testing of strategies and running simulations.
- Developing an upgraded iteration that utilizes machine learning for price prediction at confidence intervals.
- Application of Pybrain Supervised Learning neural networks in addition to *sklearn* classifiers.

Multi-Threaded Optimization & Performance Testing

Summer 2017

- C Implementation of multi-threaded programs that operate with consideration for shared variables (linked list operations, shared counters) managed by mutex/spin-lock protection of critical sections.
- Achieved up to 8.7x increase in throughput compared to single-threaded baseline for image-smoothing program
- Measurement and analysis of throughput and wait-times against independent variables using *gnuplot* and Google Performance Tools.

Object-Oriented Design & Implementation

Winter 2016

- C++ implementation of a maze-solving game with a graphical user interface.
- Efficient design of classes and inherited data structures for increased performance.

EXPERIENCE:

Software Engineering Intern: *Developer for dailybruin.com*

Oct 2017

- Django-based web application development. (In progress)

Qualitative Assurance Intern: *Anytime Fitness*

Jun 2015 – Sep 2015

- Script (shell, python) writing to facilitate QA processing and improve business operations.

Operations Specialist: *Republic of Singapore Air Force*

Feb 2013 – Feb 2015

- Designed multi-user Microsoft Excel database for data analysis of over 500 trainee pilots.
- Streamlined data ingestion process for data analytics and reviews.
- Served as personal assistant to the department head.

ACTIVITIES & INTERESTS:

Blockchain Technology: *Learning Solidity (JavaScript-based) for Ethereum-based Smart Contract development.*

- Integration of trading robot project onto Poloniex and Bitfinex cryptocurrency platforms.

Tensorflow: *Working towards becoming an active contributor to the open-source project.*

- Auditing and taking graduate classes on machine learning and pattern recognition to improve knowledge.

Track & Field (Shot Put): *Singapore National Team and UCLA Varsity Team (Athletics Scholarship recipient)*

- National record holder in multiple age groups, World top-30 youths and juniors, Asia top 3.
- UCLA Student-Athlete of the Week (1x), UCLA Student-Athlete Honor Roll.

Foreign Languages: *Mandarin, Cantonese*