ALEX YANG

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EDUCATION

University of California, Berkeley   Aug 2016 - May 2020
B.A. in Computer Science, GPA 3.61

Course Highlight: Data Structures, Algorithms, Operating Systems and Systems Programming, Machine Learning, Compilers, Probability and Random Processes, Optimization Models, NLP, Computational Photography, Graphics
Awards: Best Paper Award in Time-Critical Cyber Physical Systems Workshop, IEEE WCNC 2018
2015 American Invitational Mathematics Examination, Qualifier (AMC12A/AMC12B)

EXPERIENCE

Facebook | Menlo Park, CA   Jun 2019 - Aug 2019
Performance and Capacity Engineer Intern

· Built autonomous performance driven codemod and performance testing system that supports Facebook's entire C++ repo
· Created Thrift service that launches canaries from a commit and extracts performance and service metrics into Web UI
· Developed codemod service that uses performance data and Clang-based AST transformation rules to perform code changes

Electronic Arts | Redwood Shores, CA   May 2018 - Aug 2018
Software Engineer Intern

· Implemented synchronous rate limiting into EA's digital platform, protecting server-side resources and limiting fraud
· Worked with NoSQL databases to record API hits and accurately calculate scalable ban times across multiple threads
· Developed a centralized mobile subscription service for EA licensed games on Android/iOS devices

Qualcomm Ubiquitous Swarm Lab | Berkeley, CA   Jun 2017 - Dec 2018
Undergraduate Researcher

· Reduced latency in wireless sensor networks following IEEE standards by changing packet scheduler in OpenWSN OS
· Wrote UDP app in Python and C that sends packets across a network, calculating packet latency accurately to 30.5 μs
· Created Python script to interface with AnalogDiscovery2 and onboard GPIO pins, measuring latency accurately to 0.5 ms

Ripple, CMG Strategy Consulting | Berkeley, CA   Jan 2019 - May 2019
Project Manager

· Led a team of six analysts to recommend digital wallet market entry strategies in Asia, MENA, and South America
· Storyboarded the 12-week project, created weekly analyst assignments, compiled two deliverables and executive summaries, navigated back and forth between client, Haas MBA advisors, and analysts, and shaped professional and social team culture

Computer Science Mentors | Berkeley, CA   Jan 2017 - May 2019
Senior Mentor

· Held weekly private and small group tutoring sessions to 41 students, personalizing each session to students' questions
· Guided 5 junior mentors in weekly meetings. Practiced teaching strategies/techniques, helping them become better tutors
· Created exam-level problems and wrote 3 topical guides. Improved test performance of a significant number of my students

PROJECTS

Low Latency Research Project   Jun 2017 - Feb 2018

· Explored how packet latency can be reduced by increasing active TX/RX slots in a Time Slotted Channel Hopping network.
· Built test harness to simulate factory setting, sending millions of packets asynchronously from child sensors to root mote.

A. Yang, A. Sundararajan, C. B. Schindler, and K. S. J. Pister, Analysis of Low Latency TSCH Networks for Physical Event Detection, in Wireless Communications and Networking Conference Workshops (WCNCW), 2018 IEEE. IEEE, 2018, pp. 167-172.

SKILLS & INTERESTS

Technical Skills   Python, Java, C, SQL, Hack, C++, Thrift, Redis, Buck, HTML/CSS, JavaScript
Interests   Crosswords, Soccer, Chess, Tetris, Handmade noodles, Baking, Hiking around the world