

Ethan Chang

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(650) 267-1493
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Education

University of California, Berkeley

Expected Graduation: May 2023

B.A. in Computer Science

GPA: 3.651

- Relevant Coursework: Artificial Intelligence, Computer Architecture, Computer Security, Cloud Computing, Data Structures, Designing Information Devices and Systems, Discrete Mathematics and Probability Theory, Efficient Algorithms, Data Science, Structure and Interpretation of Computer Programs, Self-Driving Cars, Computational Biology, Economics (Macro and Micro), and Investment

Experience

SAP Ariba *Full Stack Developer Intern*

June 2021 - September 2021

- Developed B2B online marketplace REST API endpoints simulating shipment data from 50+ million sales leads/suppliers
- Built a backlog HTTP service to record 195+ million catalog items from Ariba Network, eBay, Mercado Libre, and Mercateo
- Automated web server deployment and build lifecycle with Apache Tomcat Maven Plugin; reduced total downtime by ~80%
- Increased production codebase's unit test line coverage, 50,000+ lines of code, by ~10% using Junit, Mockito, and Reflection

InVisit *Software Developer Co-op*

November 2020 - Present

- Integrated contact tracing software and user analytics cloud platform into InVisit CRM used by 100+ public facilities
- Streamlined visitor checkout flow by x10 with implementation of social login, QR code generation, proximity beacon API
- Created a vaccination verification microservice using Google Cloud Platform, Object Detection, and OCR with ~50 daily users
- Archived 95% classification accuracy in detecting fraudulent vaccination cards and verifying digital identity

Aggage *Lead Software Engineer*

August 2019 - February 2021

- Co-founded a startup that provides mentorships, tutor sessions, and shipping services for international students
- Programmed a local mentor finding application with React frontend, Node.js backend, and Firebase database
- Connected 150+ active users/subscribers to 100+ mentors through a customer network service

Berkeley RadWatch *Backend Developer*

November 2019 - February 2021

- Optimized the SQL database schema; increased DB scalability with Amazon RDS; improved runtime efficiency by ~60%
- Developed the server-side web API and the TCP/IP socket of a network of 50+ international dosimeter stations/servers
- Leveraged CNNs with Tensorflow's Keras API to classify radiation anomalies on 60,000+ live gamma channel data
- Delivered analytic reports to international nuclear safeguard agencies, the US government, and other research institutes

Activities

Berkeley Future Business Leaders of America - Phi Beta Lambda

February 2021 - Present

- Teach a 12 weeks technology curriculum: microservice architecture, web-scraping, data manipulation, and ML algorithms
- Lead the *Tech Committee*, a team of 6-8 members and full-stack developers, in agile software development

Day Trading + Growth Investing Bot

March 2021 - August 2021

- Built a trading bot on ThinkorSwim leveraging growth investing principle, day trading strategy, and convolutional neural network
- Achieved ~20% APY in trading simulation with stocks randomly selected from a pool of +300 stocks stored in MongoDB

1st place at UC Berkeley Dorm Ex Machina Competition

August 2019 - December 2019

- Constructed an IoT based facial recognition door opener with Raspberry Pi and external ML libraries
- Acquired funding from angel investors and UC Berkeley to further develop and market our product

Skills

Programming: Python, Java, C++, C, MATLAB, Javascript, HTML, CSS, SQL, Scheme, Swift, Lisp, X86, RISC-V

Tools: Spring, GCP, TensorFlow, OpenCV, PyTorch, React, Node.js, Django, Firebase, AWS, Jenkins, Maven, Git, Jira, Arduino, Linux

Models: Hierarchical Bayesian Model, Clustering, Classification, SVM, CNNs, Deep Neural Networks, Reinforcement Learning

Business: Product Management, Financial Modeling, Business Analytics, Entrepreneurial Leadership, Market Research

Extracurriculars: Surfing, Skiing, Swimming, Jogging, Basketball, Guitar, Debate, Trading