Andrew Chau

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University of California, Los Angeles — June 2021

- BS Computer Science, 3.72 GPA
- **Related Coursework:** Distributed Systems, Machine Learning, Data Science Fundamentals, Algorithms and Complexity, Operating Systems, Computer Networks, Database Systems

Work Experience:

3Diligent, *Backend Software Engineering Intern* — March 2020—September 2020

- Optimized price points of manufactured parts by deploying a dynamic machine learning model that learns from customer habits. Implemented with Weka on a Java Spring-Boot microservice.
- Enabled SMS and voice calls between site administrators and users using Twilio API integrations.
- Boosted user interaction by implementing email and on-site notifications for communication.
- Streamlined weekly deployments by utilizing Cucumber to build automated, end-to-end API tests.

Gracepoint, *Web Development Intern* — June 2020—August 2020

- Engineered backend API infrastructure for an educational site set to service hundreds of students.
- Built front-end user authentication and backend API authentication with multiple user types.
- Managed server deployments, PostgreSQL database, and cloud storage integrations for production environments using Heroku, AWS RDS, and Google Firebase.

SAS Institute, *Technical Intern* — June 2019—August 2019

- Ensured integrity of SAS Cybersecurity data processing by building and operating a customizable test automation suite in Bash and Python.
- Integrated automation suite into Jenkins web interface to test local and customer deployments.
- Developed tests in Jupyter Notebooks using Python Pandas to validate data transformations.

SuperMoney, *Engineering Internship* — June 2018—September 2018

- Improved user experience and workflow of product comparison pages by building a full-stack framework to match users with highly rated companies and directly request financial quotes.
- Developed loan calculator widget to estimate a user's APR by matching him or her with similar peers in the database and averaging offers they received.

Skills:

Languages: Python, Go, JavaScript, Java, C++, C, SQL, JSX, Bash, HTML, CSS
Technologies: Linux, Pandas, SKLearn, Jupyter, Weka, Paxos, Git, IP, TCP, React, Node, Spring Boot, Flask, REST, Postman, S3, RDS, PostgreSQL, MongoDB, Neo4j, Google Firebase, Cucumber, jQuery, Bootstrap

Personal Projects:

Sharded Key-Value Store, *Go* — April 2020—May 2020

- A distributed key/value server featuring a fault-tolerant configuration service and several replicated server groups. The configuration service automatically balances load between replica groups.
- Utilized a self-written Paxos library to guarantee fault-tolerance in isolated server groups.

Taxi Ride Duration Model, *Python3 / Jupyter Notebook / SKLearn* — March 2020

- Machine learning SVM model trained on over 80,000 data points to predict taxi ride durations in Manhattan. Utilized complex feature selection and engineering, such as using PCA to separate the city into Upper, Lower, and Midtown Manhattan.
- Applied cross validation on several SVM kernels and hyperparameters to select a final model.

Crossword Solver, *Python3 / Neo4j* — July 2019—August 2019

- Solved crosswords by matching clues with data from all *New York Times* puzzles since 1942.