Andrew R. Chen

Computer Science at Princeton University

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Education

Princeton University

Princeton, NJ

BSE in Computer Science, GPA: 3.9, Major GPA: 4.0 — *Sep. 2019 - PRESENT*

- Currently enrolled in COS 318 (Operating Systems), COS 429 (Computer Vision), PHY 205 (Classical Mechanics), ECO 311 (Macroeconomics), MUS 103 (Introduction to Music).
- Relevant Coursework: COS 226 (Algorithms and Data Structures), COS 217 (Intro to Programming Systems), COS 340 (Reasoning about Computation). Received grade of A in all.

Mission San Jose High School

Fremont, CA

Valedictorian, GPA: 4.0 unweighted — *Sep. 2015 - Jun. 2019*

Coursera

Online Certificates

- Machine Learning, taught by Andrew Ng. (Grade: A)
- Sequence Models, taught by Andrew Ng.(Grade: A)

Skills

- Java (5 years), Python (3 years), C++ (2 years), C (6 months), Golang (2 months)
- Kubernetes, Helm, Docker, AWS
- Supervised Machine Learning, Convolutional and Recurrent Neural Networks, SVD
- Tensorflow, Keras
- PostgreSQL, TimescaleDB, MySQL
- Linear Algebra, Statistics, Multivariable Calculus
- IntelliJ, Visual Studio Code, Android Studio, Vim
- Linux, Windows, MacOS
- Competition Programming, Math, Physics

Experience

Timescale

New York, NY

Summer Intern — *Jun. 2020 - Aug. 2020*

- Designed and implemented CLI tool in Golang to facilitate usage of observability stack.
- Fixed compatibility of Timescale Observability Helm chart with Timescale Forge.

swarmin.ai

Fremont, CA

Intern — *Jan. 2020 - Jun. 2020*

- Prototyped and designed SVD recommender system in Python and Matlab.
- Worked on privacy-preserving federated learning algorithms.
- Deployed AWS Lambda functions for continuous updates to recommender.

Stanford Linear Accelerator Center

Palo Alto, CA

Summer Intern — *Jun. 2016/17/18 - Aug. 2016/17/18*

- Developed a machine learning algorithm to classify stages of Alzheimer's disease.
- Used Python with Tensorflow to create and test a convolutional neural network that took in MRI and PET scans and outputted a classification between cognitively normal, mild cognitive impairment, and Alzheimer's disease.
- Developed code to extract and scale 2D slices of images from 3D PET and MRI scans.
- Achieved accuracy close to that of professional radiologists.

Extracurricular Activities

Princeton University

Rocketry Club

Member of Thrust Vector Control Team

- Designed software to control a gimbaled motor and stabilize a rocket along its trajectory, using Arduino and Matlab.

International Collegiate Programming Contest

Participant

Linux

User

- Self-learned how to use Linux.
- Currently dual-booting Arch Linux and Windows.

Mission San Jose High School

Science Bowl

Captain

- Organized and held weekly practices.
- Created reading schedule for members to follow.
- Participated in the regional Science Bowl competition.

Math Club

President

- Held weekly lectures on a variety of math topics.
- Organized a school-wide math competition, held over 2 weeks.
- Participated in Berkeley Math Tournament and Stanford Math Tournament.

FTC Robotics

Team Hyperion 9614

- Worked on software for remote-control and autonomous modes for controlling a robot, using Java in Android Studio.

Volunteer Elementary/Middle School Teaching

Lead Instructor

- Taught elementary and middle schoolers math and science concepts not usually taught in school during weekly classes.
- Organized and prepared students for competitions like the American Math Competition, Mathcounts and Science Bowl.

Honors & Awards

2014-19 **Qualified**, American Invitational Mathematics Examination (AIME)
2018 **Platinum Division**, USA Computing Olympiad
2018 **Gold Medal**, USA Physics Olympiad