Aaron Lou

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EDUCATION

CORNELL UNIVERSITY
BA in Math and Computer Science

Expected May 2021 | Ithaca, NY

College of Arts and Sciences

GPA: 4.03 / 4.0

Extracurriculurs:
Cornell Data Science
Cornell Putnam Team
Cornell ACM-ICPC

SKILLS

LANGUAGES
10k+ lines
• Java • Python
5k+ lines
• C++ • OCaml
1k+ lines
• Javascript • CSS • HTML • C

TECHNOLOGIES
Machine Learning
• TensorFlow • Keras • Scipy
BackEnd
• NodeJS • Flask • Spark • WebSocket
Misc
• Git • LaTeX • Markdown

COURSEWORK

GRADUATE
• Computer Vision (audit, in progress)
• Real Analysis (in progress)
• Enumerative Combinatorics

UNDERGRADUATE
• Introduction to the Analysis of Algorithms (in progress)
• Computer System Organization and Programming (in progress)
• Data Structures and Functional Programming
• Discrete Structures
• Honors Object Oriented Programming and Data Structures

SELF-STUDY
• Convolutional Neural Networks For Visual Recognition (Stanford CS231n)
• Deep Reinforcement Learning (Berkeley CS294)

EXPERIENCE

LOGOS NEWS LLC | Data Scientist/NLP Engineer Intern
July 2018 – September 2018 | Los Angeles, CA

Led team of 4 other interns to develop and deploy machine learning algorithms for news recommendations. My contributions were:
• Developed two neural networks for clustering news headlines (semi-supervised) and extracting user features.
• Built a data pipeline to clean, vectorize, and model text snippets. Deployed over Google Cloud App Engine using Flask.

CORNELL DATA SCIENCE | Team Member
September 2017 - Present | Ithaca, NY

• Spring '18: (Deep Learning Team). Researched neural networks for music generation.
• Fall '17: (Kaggle Team). Competed in Kaggle Competitions.

PROJECTS

TENSORFORCE | Code Contributor
Jun 2018 - Present

Tensorforce is one of the most popular open source reinforcement learning software packages built in TensorFlow. In addition to mainting an active community on gitter and github, I've
• Implemented bindings for reinforcement learning environments.
• Integrated Deep Learning features (such as KFAC optimization) and Reinforcement Learning agents.

2ESCAPE | Project
Feb 2018 - May 2018

Led team of 4 students to design and build a distributed two player puzzle game, architecting core modules and game features. In particular:
• Designed and implemented game state and logic for server computation(**OCaml**).
• Developed front-end GUI (**JS**, **CSS**, **HTML**).
• Built WebSocket server and client (**NodeJS**).

CRITTER WORLD | Project
October 2017 - December 2017

Built life simulator with student partner, drawing in concepts from languages, algorithms, and software development. Done in **Java**. Notably:
• Developed an AST to represent "critter" programming.
• Implemented interpreter to execute actions in simulated world.
• Built GUI to allow user control and visualization.
• Deployed over Spark with admin, writer, and reader privileges.

AWARDS

Year	Placement	Award
2018	1st place	Cornell Mathematics Freshman Exam
2017	top 300/10,000	USA Mathematics Olympiad Qualifier
2016	Milestone	Eagle Scout
2016	top 500/2000	Siemens Competition Semifinalist
2016	top 100/2000	USA Computing Olympiad Platinum Division