James Mayclin

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EDUCATION

STANFORD UNIVERSITY
BS in Mathematical and Computational Science

Minor in Music

GPA: 3.71 / 4.0
Expected June 2020 | Stanford, CA

LINKS

Github:// **jmayclin**
LinkedIn:// **jmayclin**

COURSEWORK

MSE211X • Introduction to Optimization
CS229 • Machine Learning
CS231N • CNNs for Visual Recognition
CS227B • General Game Playing
CS269Q • Quantum Computation
STATS200 • Statistical Inference
MSE221 • Stochastic Modelling

SKILLS

PROGRAMMING

Proficient
Python • C++ • Java • R • C
Blender
Experience
SQL • JavaScript • HTML • CSS
pytorch • git • comdb2
Exposure
Prolog
tensorflow • node.js • mongoDB

EXTRACURRICULARS

Stanford Light Opera Company
• Board Member
Stanford Chamber Chorale
• Participant
Department of Music
• Student Accompanist
LGBTQ in Government and Law
• Participant

EXPERIENCE

BLOOMBERG | Software Engineering Intern
June 2019 – Aug 2019 | New York, NY

- Worked on instantaneous, fixed-order messaging platform with 400,000 users.
- Implemented intelligent load-balancing to normalize CPU usage among servers using behavior learned from historical trends.
- Refactored legacy load-balancing code to simplify and reduce external dependencies.
- Data processing in Python, SQL and server features in C++

STANFORD CS106 | Section Leader
Dec 2017 – Present | Stanford, CA

- Teach weekly fifty-minute section for introductory computer science course.
- Help students debug Java and C++ code in office hours.
- Provide individual feedback to students in interactive grading session.

INFOSYS | Instep Intern, Data + Analytics
June 2018 – Sep 2018 | Bangalore, India

- Designed pipeline for leveraging 3D models to produce labeled computer vision datasets.
- Defined use-cases for application of technology and set long term development goals.
- Collaborated with a team of six people to enable future development.
- Wrote extensible library in Python to leverage existing rendering software and generate labels and object masks for data.

RESEARCH AND PROJECTS

MATCH PREDICTION FOR STARCRAFT II
Final Project for CS229 with partner

- Gathered replay data from approximately 100,000 Starcraft II matches
- Used convolutions to evaluate unit configurations
- Combined with vanilla neural networks for other feature evaluation
- Implemented with pyTorch

THORACIC IMAGING TEMPORAL INTERPOLATION
Final Project for CS231n with partner

- Applied CNNs to improve resolution of MRI cardiac scans
- Worked with anonymized data from University of Kentucky Medical Center.
- Implemented using pyTorch

SILVER NEST
Current Personal Project

- Personal project for rule-based management of finances
- REST API for interaction between accounts
- Automates transfers between checking, savings, investments
- Server in python - Flask, interaction with python - Selenium