# Dean Stratakos

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#### **FDUCATION**

#### STANFORD UNIVERSITY

**BS IN COMPUTER SCIENCE** 

Sep 2018 - (exp) Jun 2022 Stanford, CA GPA: 4.09 / 4.00

#### **SARATOGA HIGH SCHOOL**

Aug 2014 - Jun 2018 Saratoga, CA GPA: 4.71 / 4.00

#### LINKS

♣ Website: dastratakos.github.io♠ Github: dastratakosin LinkedIn: dastratakos

#### COURSEWORK

Algorithms and Data Structures Artificial Intelligence Computer Organization & Systems Machine Learning

- Convolutional Neural Networks
- Deep Learning
- Natural Language Processing

#### Mathematics

- Linear Algebra
- Multivariable Calculus
- Probability

Web Applications

### **SKILLS**

#### PROGRAMMING LANGUAGES

Proficient:

Python • C++ • C • Java • JavaScript HTML • CSS • Assembly • LATEX Familiar:

Swift • Kotlin

#### **TOOLS**

Proficient:

NumPy • scikit-learn • PyTorch • Unix TensorFlow • Git/GitHub • SQLite MongoDB (NoSQL) • Android Studio Familiar:

AWS • Microsoft Azure • Pandas

## **CLUBS AND INTERESTS**

Stanford Christian Students • Surfing Golf • Volunteering • Saturday Night Live

#### WORK FXPFRIFNCE

**APPLE** | SOFTWARE ENGINEERING INTERN, ADVANCED COMPUTATION GROUP Oct 2020 - Present | Portland, OR (remote)

#### APPLE | SOFTWARE ENGINEERING INTERN, PANIC TRIAGE TEAM

Jun - Sep 2020 | Cupertino, CA (remote)

- Improved the performance, scalability, and maintainability of a machine learning clustering algorithm that grouped duplicate kernel panic reports.
- Achieved cluster efficiency ARIs of 84-89% for 2 new panic signatures on iOS, macOS Apple Silicon, and macOS Intel.
- Concepts included agglomerative clustering, tf-idf , and cloud storage.

## 

June - Aug 2019 | Burlingame, CA

- Implemented the back end for 6 CNN layers in a C++ based intermediate language on a specialized edge-computing hardware architecture.
- Analyzed compile-time and run-time optimizations for a deep learning network.
- Studied post-training weight quantization to improve inference efficiency.

#### TECHNICAL PROJECTS

#### PHOTO SHARING WEB APPLICATION | CS 142

May - Jun 2020 | Languages: JavaScript, HTML, CSS | ▶ YouTube demo 🗗

- Developed a full stack ReactJS web application with a Node.js web server.
- Utilized a Mongo DB database and Material-UI front end components.

#### **OPTIMIZED TASK SCHEDULING PROJECT** | CS 221

Nov - Dec 2019 | Language: Python | ♠ GitHub repository 🗹

• Created a reinforcement learning model using value iteration and Q-learning to optimize revenue and customer satisfaction for service-based businesses.

#### PAC-MAN AND AUTONOMOUS CAR ASSIGNMENTS | CS 221

Nov 2019 | Language: Python

- Implemented pathfinding algorithms to dictate optimal actions in various maps.
- Concepts included minimax, alpha-beta pruning, and Bayesian Networks.

#### **ACTIVITIES**

## STANFORD UNIVERSITY VARSITY TENNIS TEAM | MEMBER

Sep 2018 - present

• Balance 20+ hours/week of training as a member of a Division I team ranked in the top 10 nationally with a full academic course load.

## **STUDENT-ATHLETE ADVISORY CMTE** | MEMBER, SOCIAL EVENTS Sep 2019 - present

- Direct events with 100+ attendees to strengthen student-athlete community
- Maintain open communication between administration and student-athletes

#### ABACUS AT JIN'S MENTAL ARITHMETIC ACADEMY

2007 - 2018

- Learned to use the abacus a Japanese tool for fast mental math calculations.
- 1st place in Mental Dictations at the international level | 2015, 2016, 2017.