# David Chen

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## **Education**

Harvey Mudd College

Claremont, CA Aug 2021 - May 2025

B.S. in Computer Science (GPA: 4.0), Harvey S. Mudd Merit Scholar

Relevant Coursework: Principles & Practice: Computer Science, Single & Multivariable Calculus, Linear Algebra

Intramural & Club sports: Volleyball (Grass, Court, Sand), Badminton, Frisbee, Spikeball, Flag Football

**Princeton High School** 

Princeton, NJ

GPA: 4.0/4.0 (4.7/5 weighted), National Merit Scholar, National AP Scholar

Sep 2017 - June 2021

GFA. 4.0/4.0 (4.7/3 Weighted), National Ment Scholar, National Ar Scholar

Activities: PHS Math Team (Captain), PHS Algorithms Club (Captain), Princeton Soccer Association (Captain)

Relevant Coursework: AP Computer Science, Data Structures and Algorithms, Multivariate Calculus and Linear Algebra, AP Statistics **Independent Study** 

Stanford graduate courses (CS221, 231n, 224n, 230): Artificial Intelligence, Computer Vision, Natural Language Processing, Deep Learning

# Work Experience \_

SOFTWARE ENGINEER INTERN

Scout AI (backed by Y Combinator)

Mountain View, CA

May 2021 - Aug 2021

- · Designed and built merchant-facing real-time restaurant promotion iOS app with Swift/Firebase, created demos for pitch deck
- Set up database to sync with consumer app, emulated and deployed Node.js Cloud Functions to notify users and clean data
- · Brainstormed and implemented business strategies based on restaurant feedback centered on loyalty and growth

Google
Computer Science Summer Institute

Mountain View, CA

July 2021 - Aug 2021

• Expanded and presented 15 daily projects and capstone with JS/Firebase, mentored by Google engineers in advanced track

Slingshot Pittsburgh, PA

SOFTWARE ENGINEER

Oct 2020 - May 2021

- Unified GitHub, Trello, and Google Apps in responsive company-wide automation portal with React and Firebase
- Led teaching and outreach events: taught a 6-week algorithms bootcamp and wrote problems for the UAE's first algorithmic codathon

  Machine Learning Research Intern

  July 2020 Oct 2020

Described knowledge division and the property of the property

- Researched keystroke dynamics (typing patterns) and built React Native app for non-intrusive mobile continuous verification
- Reached 89% classification accuracy with ensemble voting system tuned to sparse data, compared to 68% from baseline KNN models

#### Academic Research

## **Arthur Benjamin's Backgammon Group**

Claremont, CA

SUNDEMAN RESEARCH ASSISTANT

March 2022 - Present

• Developed website for rapid iteration regression testing to create optimal, memorable backgammon strategies based on game state

### **Microfluidics and Biomaterials Lab**

Claremont, CA

STUDENT RESEARCHER - DATA VISUALIZATION AND WEB DEVELOPMENT

Sep 2021 - Present

- Created visualizations for critical reflection on the engineering design process to promote non-linear design and diverse team culture
- · Built personalized web dashboard for individual and team self-reflection, automatically integrating plots from Python and R

## **Activities**

Product Space
Machine Learning Product Manager

Claremont, CA Feb 2022 - Present

• Industry Capstone: Analyzed data and designed specialized machine learning methods to recommend candidates to recruiters

PRODUCT MANAGEMENT FELLOWSHIP

to recruiters Sep 2021 - Present

• Participated in weekly interactive workshops and guest events, learning and developing core product management skills

P-ai

PROJECT P-CLIMATE

Claremont, CA Sep 2021 - Dec 2021

• Reconstructed historical climate information by preparing tree ring data and building recurrent neural networks robust to noise

# **Projects**

**Ruzzle Solver:** Designed first mobile-only Python program to automate a word finding game with OCR, graph theory, and prefix tries **Reddit Username Generator:** Trained LSTM/GRU models on 400k usernames for text generation, integrated into React through TF.js **pingmote:** Developed hotkey triggered cross-platform global emote picker to create and quickly insert custom images and gifs **Arduino & RasPi Self-Driving Car:** Built obstacle avoiding robot, tuned ROS models in Gazebo sim to speed up maze navigation by 37%

#### Awards

Citadel - The Data Open: 1st Place - West Coast (\$10,000 prize)

2021

Hackathons: HackPHS 2020 (1st): SMS-based virtual learning, HackPHS 2019 (3rd): Sentiment investing advisor

2019 - 2020

#### Skills

Languages: Fluent in Python; Familiar with HTML/CSS/JS, TypeScript, Swift, Java, C/C++, SQL

Technologies: React, React Native, Next. js, Firebase, Flask, Node. js, TensorFlow, Pandas, Selenium, Git, Linux, Latex