# **David Chen**

3639 Haven Ave Unit C319 Menlo Park, CA. 94025 (US Citizen) Updated: 11/30/24 (978) 866-2118

real17chend@gmail.com dchen17chend@meta.com

#### **EDUCATION**

Stanford University: Stanford Center for Professional Development, Stanford, CA.

2022 - Present

• Part-time: Al Graduate Certificate Path. GPA: 4.3/4.3

Carnegie Mellon University: School of Computer Science, Pittsburgh, PA.

2017 - 2021

• Major in CS, Minor in Math. GPA: 3.95/4.0

## **EXPERIENCE**

Meta, Menlo Park, CA. - SWE

2021 - Present

- Android and full stack engineer for FB Notifications and FB Feed Experience Infra.
- Led the Android Top Updates Widget project from development all the way to launch and promotion, and continued improvements.
  - Android development includes setting up logging infrastructure, creating custom logic to get content from the server, implementing and updating the UI, etc.
  - Collaborated closely with backend + ML Eng and contributed to PHP server logic.
  - Ran a series of A/B experiments to analyze impact on company topline metrics.
  - Presented to PMs and data scientists to successfully launch an impactful project that boosts Facebook sessions and daily active users (DAU).
- Collaborated with various teams to add in additional entry-points for the Birthday Center, driving millions of new visits and impact in the form of birthday wishes.
- Drove Java to Kotlin conversion efforts across all Android engineers in the notifications org, reaching 100% Kotlin goal 1 year ahead of schedule.

Facebook (AR/VR), Menlo Park, CA. - SWE Intern
GoDaddy, Kirkland, WA. - SDE Intern
Akamai Technologies, Cambridge, MA. - SDET Intern

2020 Summer

2019 Summer

2018 Summer

Carnegie Mellon University: School of Computer Science, Pittsburgh, PA. - Student 2017 - 2021

- Counterspace Games Research Producer (2019-2020)
  - Supervisor: Erica Cruz
  - Coordinated team of undergraduates in development of game prototypes.
  - Developed multiple prototypes using Unity game engine.
  - o Conducted interviews during the team selection process.
- Research in Partitioning-based approaches for Maximum Satisfiability (2018)
  - o Supervisor: Dr. Ruben Martins
  - Devised and implemented preprocessing techniques for MaxSAT solvers and analyzed impact on performance for competition benchmarks.

### Acton-Boxborough Regional High School, Acton, MA. - Student

2013 - 2017

• Taught Python programming at Acton Chinese School for multiple semesters.

## **HACKATHON PROJECTS**

#### CMU TartanHacks: stretched

2019 Spring

- Grand Finalist for CMU TartanHacks.
- Cooperative, 3D puzzle game with an environment stretching as the main mechanic.
- Devpost link: <u>devpost.com/software/s-t-r-e-t-c-h-e-d</u>

# GoDaddy: ReSocial

2019 Summer

- Customer Innovation category winner for GoDaddy's Intern week hackathon.
- Website dashboard for businesses to monitor online reviews, built with React.

### **EXCERPT OF RELEVANT COURSE PROJECTS**

# Stanford: CS234 Reinforcement Learning Final Project

2024 Spring

- Discovered and evaluated flaws in existing Decision Transformer research relating to the "trajectory stitching" issue.
- Extended research on the Waypoint Transformer approach, with potential improvements on benchmarks and better understanding of the importance of waypoint location.
- Paper link: davidigchen.github.io/stitching-paper.pdf

## **Stanford: CS230 Deep Learning Final Project**

2022 Spring

- Extended research on satellite image machine learning (SIML) through multi-task learning on ResNet models.
- Extended application of the model to prediction of self-storage facility prices in a location given satellite image data.

## CMU: 15-688 Practical Data Science (Master's Level) Final Project

2019 Fall

• Processed and analyzed Reddit data using various data analysis and ML techniques.

### **RELEVANT CS & MATH COURSEWORK**

- 15-441: Computer Networks
- 15-462: Computer Graphics
- 10-315: Machine Learning
- 10-403: Deep Reinforcement Learning and Control
- 15-688: Practical Data Science
- 21-261: Introduction to Ordinary Differential Equations
- 21-341: Linear Algebra

- 21-355: Principles of Real Analysis I
- 21-373: Algebraic Structures
- 15-317: Constructive Logic
- CS230: Deep Learning
- CS234: Reinforcement Learning
- STATS200: Statistical Inference
- STATS217: Introduction to Stochastic Processes I
- Many more courses I could not fit here.

#### **COMPUTER & PROGRAMMING SKILLS**

- Game development with Unity Engine: <a href="mailto:github.com/DavidJGChen">github.com/DavidJGChen</a>
- Proficient in **Python**, JavaScript, C, C++, **Java**, **Kotlin**, C#, SML, SQL, LaTeX, Typst, etc.
- Familiar with PyTorch, Android, React, .NET Core, Electron.js, Node.js, and many others.

### **OTHERS/HOBBIES**

- Personal website: <u>davidjqchen.github.io</u>
- Self-studying and reviewing math and theory:
  - o Current interests: analysis, probability theory, multi-armed bandits.
- Successfully quit my video gaming hobby.
- Typst (alternative to LaTeX) enthusiast!