

Charlie Chen

(484) 686-1251 | charliechen@college.harvard.edu | github.com/cchenalds17 | U.S. Citizen

EDUCATION

Harvard University

Cambridge, MA

Bachelor of Arts in Computer Science | GPA: 3.95/4.0

May 2027 (expected)

- Relevant Courses: Data Structures & Algorithms, Intro to Machine Learning (MIT), Systems Programming, Intro to Probability, Linear Algebra, Multivariable Calculus
- Currently Enrolled: Intro to Distributed Computing, Intro to Electrical Engineering, Economics & Computation

Friends Select School

Philadelphia, PA

High School Diploma | GPA: 4.31/4.0, Phi Beta Kappa | Student President, CS Club Founder

June 2023

PROJECTS ([CCHENALDS17.GITHUB.IO](https://cchenalds17.github.io))

Lex Ed | Personal Project | Next.js, Tailwind, Django REST Framework, SQL, OpenAI API Dec. 2024 - Present

- Developed personalized grammar learning web app to help users improve through error correction and targeted practice
- Created Django REST API backend to handle CRUD operations and OpenAI API calls for language processing
- Built grammatical error correction and practice React modules, generating exercises tailored to users' common mistakes

Practic.io | CS50 Final Project | Python, Flask, SQL, HTML, CSS, Bootstrap, JavaScript

Nov. 2023

- Developed mobile-friendly music practice web app with journaling and practice history tracking features

Mask Detector | Personal Project | Python, OpenCV, MobileNetV2, C, Arduino

Sept. 2021 – Dec. 2022

- Built machine using MobileNetV2 to detect unmasked faces with 91% accuracy and spray them with water

EXPERIENCE

Harvard Tech for Social Good | Cambridge, MA

Sept. 2023 – Present

Project Manager – UNICEF: GeoSight SDMX Data Warehouse Integration

- Developed React-based dynamic filtering for SDMX-formatted UN data in GeoSight from UNICEF Data Warehouse
- Led code reviews for 5 SWEs, ensuring clean code and effective client communication through iterative design process
- Work showcased at the OSGeo's 2024 FOSS4G Conference, highlighting modern open-source geospatial data solutions

Software Engineer – Matanataki: Impact Reporting Platform

- Developed Next.js impact tracking platform with admin dashboard, facilitating management of 15 portfolio companies

Software Engineer – Darsel: Personalized Learning Algorithm

- Optimized XGBoost model to 80% accuracy, enhancing personalized learning for 100,000+ low-bandwidth users

University of Pennsylvania NLP Group | Philadelphia, PA

May – June 2023

Natural Language Processing Intern

- Analyzed LLM-generated grammatically incorrect sentences using few-shot learning

University of Pennsylvania Wharton School | Philadelphia, PA

June – Aug. 2022

Research Intern

- Optimized BERT and FinBERT models with PyTorch, achieving 93% accuracy in text readability prediction

TECHNICAL SKILLS

Languages: Python, JavaScript, TypeScript, HTML/CSS, SQL, LaTeX

Frameworks & Tools: React, Next.js, Supabase, Flask, Django REST Framework, Tailwind CSS, Bootstrap, NumPy, Matplotlib, Pandas, OpenAI API, Git, VS Code, Jupyter

OTHER

Harvard Radcliffe Orchestra | Trumpet Player

Sept. 2023 - May 2024

Fluent Languages: English, Mandarin

Special Skills: Trumpet, Piano, Cooking, Speedcubing