EVAN TAO

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In · Github

Passionate Software Developer and Educator, Transitioning to Software Engineering Full-Time

EDUCATION

University of Pennsylvania

Bachelor of Science in Computer Science GPA 3.44 · Dean's List 2015-2016 Philadelphia, PA Sep 2014 - Jun 2018

Work

New York City Department of Education

New York, NY Sep 2019 - Present

Lead Computer Science Teacher · Java, Python, Javascript

- Founded and established the school's AP Computer Science A program in Java
- Launched AP Computer Science Principles projects in Javascript, culminating in a 10-hour capstone project
- Innovated an elective course in Python, covering topics in advanced algorithms and data structures
- Achieved an 81% college readiness rate in AP Computer Science Principles in 2022, exceeding the NY average by 20%
- Won the AP Computer Science Female Diversity Award winner from 2019 to 2023 (more than 50% female exam takers)
- Selected by Collegeboard to score end-of-year AP Computer Science projects in 2020, 2023 and 2024
- Designed the computer science component of a 3-week Summer Bridge program for incoming high school freshmen
- Mentored 4 students for the Cornell University High School Programming Competition
- Organized tech talks for over 10 students at Google, Spotify and Infor offices

Independent Research

New York, NY

Software Developer \cdot Python, MongoDB

Jul 2018 - Sep 2019

- Implemented a neural network model in Python to recognize faces, based on research findings by Riesenhuber and Poggio
- Engineered a novel layer of image processing that improves the model's performance on face images with slightly varying positions
- Employed SVC machine learning techniques to classify over 1,000 faces, achieving an 80% accuracy rate
- Developed a client to save the training model in a MongoDB database, reducing load times for future predictions

PROJECTS

Fantasy Olympics · GitHub

Python, Node.js, Vue.js, MySQL, NoSQL, Amazon AWS

- Created multiplayer fantasy Olympics game featuring a Node.js back-end, Python web-scraping and a Vue.js front-end
- Hosted a MySQL database on an AWS RDS instance to store 20,000 Olympic athlete entries
- \bullet Implemented username and password back-end authentication using a NoSQL DynamoDB database
- Deployed the application to a cloud environment with AWS Elastic Beanstalk

Spotify Quiz Generator \cdot Live View \cdot GitHub

Ruby on Rails, PostgreSQL, Javascript, HTML, Tailwind CSS

- Built a fully-functional RESTful quiz application with a Ruby on Rails back-end and integration of the Spotify API
- Established a PostgreSQL database to reduce load times for displaying album titles and cover art
- Designed a responsive mobile-first front-end with more than 10 different views using Tailwind CSS
- Wrote comprehensive unit and integration tests using the RSpec framework to verify the application's accuracy

TECHNICAL SKILLS

Languages Java, Python, Ruby on Rails, SQL, Golang, Javascript, HTML/CSS
Tools and Frameworks AWS, Docker, MySQL, PostgreSQL, DynamoDB, MongoDB, Node.js, Vue.js, Git