Daniel Zhu

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EDUCATION

UC BERKELEY
B.A. in Computer Science
Expected May 2022 | Berkeley, CA
GPA: 3.866 / 4.0

HENRY M GUNN HIGH SCHOOL
May 2018 | Palo Alto, CA
Unweighted GPA: 3.98 / 4.0
Engineering Club (Secretary),
APCS Teaching Assistant, Badminton,
Cross Country, GunnHacks Organizer

COURSEWORK

UNDERGRADUATE
CS61A: Structure & Interpretation of Computer Programs
CS61B: Data Structures & Algorithms
CS61C: Machine Structures
CS70: Discrete Mathematics and Probability Theory
EE16A: Linear Algebra, Devices, & Systems I
EE16B: Designing Information Devices and Systems II
CS170: Efficient Algorithms and Intractable Problems
EE126: Probability and Random Processes (Spring 2021)
EE127: Optimization Models in Engineering (Spring 2021)
CS188: Introduction to Artificial Intelligence (Spring 2021)

SELF STUDY
Machine Learning by Stanford (Coursera)
Neural Networks and Deep Learning (Coursera)

SKILLS

PROGRAMMING
Proficient:
Java • Python • Swift • C#
Familiar:
C • SQL • Scheme • Octave • Shell

TOOLS
Git • NumPy • Pandas • Pytorch
Airflow • Visual Studio

LINKS

Github: **github.com/danielezhu**
LinkedIn: **linkedin.com/in/danielezhu**

EXPERIENCE

MICROSOFT | Software Engineering Intern
Bing Search | Jun 2020 - Aug 2020
- Designed and wrote all of the data ingestion code for new Microsoft Graph connector.
- Rewrote existing HTML DOM-parsing code using a new library to solve high memory usage issues. Ran experiments in performance cluster to validate the improvement.
- Implemented OCR, people-tagging, description generation (from photo), and EXIF metadata extraction functionality for team hackathon project focused on improving Microsoft search via content enrichment.

NIPUN CAPITAL LP | Software Engineering Intern
Jun 2017 - Aug 2017 | Foster City, CA
- Set up the open source tool Airflow to schedule and monitor Nipun's workflows, replacing their former system.
- Wrote programs to scrape foreign language web pages to gather data on investor sentiment.

PROJECTS

PRONECKT | Posture Detection and Correction App
Aug 2018 – May 2019 | iOS, Swift
- Created Proneckt, an iOS app that tracks user neck posture in the background during phone usage and sends notifications when it detects poor posture.

GITLET | Miniature Version of Git
November 2019 – December 2019 | Java
- Created Gitlet, a miniature version of the Git version control system.
- Gitlet contains many of the same functionalities as Git as well as several Gitlet-exclusive commands.

KARO | Automatic Manga Translator App
September 2017 | Top 30 at PennApps XVI | Expo, React Native
- App that takes an image of a Japanese manga comic page, uses machine learning to detect text boxes, then translates and replaces all Japanese text with English.

INZEN | Document Retrieval System
May 2017 | Python
- A simple search engine that uses Latent Semantic Analysis with Singular Value Matrix Decomposition to produce better rankings.

AWARDS

Year	Scope	Award
2017	International	Top 30 at PennApps XVI Hackathon
2017	International	Best Google Cloud Machine Learning API Hack at PennApps XVI
2017	International	Best Use of Expo.io at PennApps XVI
2018	National	National Merit Finalist