

Alan Zheng

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SUMMARY

Undergraduate student at the University of Virginia with extensive experience in machine learning. Has a passion for algorithms and AI.

EDUCATION

UNIVERSITY OF VIRGINIA

CHARLOTTESVILLE, VA

BS: COMPUTER SCIENCE

MINOR: APPLIED MATHEMATICS

Expected May 2022

Cum. GPA: 3.966

THOMAS JEFFERSON HSST

ALEXANDRIA, VA

ADVANCED STUDIES DIPLOMA

Cum. GPA: 4.5

SAT: 1600/1600

COURSEWORK

Data Structures • Discrete Mathematics
Theory of Computation • Algorithms
Artificial Intelligence • Machine Learning
Vision and Language

Multivariable Calculus • Linear Algebra
Probability • Differential Equations

Stanford ML Certificate

SKILLS

PROGRAMMING

Over 5000 lines:

Python • Java • JavaScript/NodeJS • C++

Over 1000 lines:

Obj-C • HTML+CSS • MATLAB • Swift

Familiar:

R • C# • SQL

TOOLS

TensorFlow • Keras • OpenCV • ROS
PyTorch • spaCy • NLTK • scikit-learn
transformers (huggingface) • Pandas
Docker • Git • Elastic Beanstalk

INTERESTS

Alpine Skiing • Dance
Piano • Guitar • Cello
Poker • Lockpicking

WORK AND LEADERSHIP EXPERIENCE

NOBLIS | DATA SCIENCE INTERN

Jun 2020 - Present | Reston, VA

- Implemented context-based tagging and Word Sense Disambiguation the **VÖR** project using lightweight NLP techniques.
- Evaluated stay-at-home order effectiveness during the COVID-19 crisis through traffic data analysis on a capstone project.

GMU LEARNING AGENTS CENTER | RESEARCH ASSISTANT

Jun 2018 - Aug 2018 | Fairfax, VA

- Worked and improved on an artificial intelligence system for evidence-based detection of Advanced Persistent Threats.

PROJECTS

CURRENT: ENSEMBLE | SOCIAL MEDIA

- Platform allowing users to organize, share, and stream media with friends in real-time from various entertainment platforms.
- Designing the backend using NodeJS, Docker, and AWS services.

CURRENT: GOGH GET PAPER | PERSONAL PROJECT

- **Web application** that generates wallpapers and landscapes based on user preference of artistic style and genre.
- Focusing on the data collection via web scraping and the backend, i.e. processing images, training the **generative models**.

SHOP WITH SPACE | HOOHACKS 2020, BEST HEALTH HACK

- **Web application** that helps promote good social distancing by informing people about the business of nearby grocery and retail stores.
- **Analyzes the satellite/streetlight data** near a particular store.
- Built with Flask, Google APIs, Python, HTML+CSS, and React.

DRONE SWARM RESEARCH | PARTNERED RESEARCH

- Year long research project developing **reinforcement learning** model to control a swarm of rescue drones to navigate buildings in real time.
- Ended with a **research paper and live demonstration** of drones swarming in a lab environment (both available on the link).

MIT BATTLECODE 2019 | GROUP PROGRAMMING COMPETITION

- Created a **game agent** in JavaScript to play a real-time strategy game against other agents created by other competitors.
- Our team of 3 (plzgoeasy) was top 7 out of 600+ college teams in the Sprint Round and top 25 in the Qualifying Round.

MOOLAH | HACKATHON PROJECT

- A smart messenger chatbot to help users manage budgets through more approachable and less rigid texting interactions using **NLP**.