

Alex Cannan

Greater New York City Area

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Work Experience

Zencastr

Remote

Senior Machine Learning Engineer

Feb 2022 - Present

Machine Learning Engineer

Oct 2019 - Feb 2022

- Developed and deployed Zencastr's transcription pipeline to automatically transcribe audio from thousands of podcasts daily, optimizing for accuracy, latency, and scalability
- Design and implementation of robust ML microservice workers for scalable data indexing and understanding
- Exposure of ML models as RESTful APIs for use in other applications across several teams
- Work closely with the product team to iterate on features and improve user experience

Your Heaven Audio

Providence, RI

Product Engineering Intern

July 2018 - Oct 2019

- Conceived, prototyped, and implemented a feedback elimination algorithm for use in embedded systems
- Applied optimizations to legacy firmware C++ code for use in a PIC32 Microcontroller

Harman International Industries

Shelton, CT

Test Engineering Intern

Summer 2017 & 2018

- Developed scripted test procedures to detect faults in microprocessor-controlled amplifiers
- Worked with team to develop scripted and written procedures for factory-level testing
- Victor of Harman's intern competitions—worked with other interns to develop marketing/business strategies for various projects

UConn Quantitative Learning Center

Storrs, CT

Physics/Math/Statistics Tutor

April 2016 - May 2018

- Provide tutoring in calculus based physics/math/stats courses, tutoring up to 10 students at once
- Able to convey abstract concept to many different kinds of students

Education

Brown University, Providence, RI

GPA: 3.5

Sc.M. Engineering (Signal Processing)

Graduated May 2020

- Relevant courses: Pattern Recognition/Machine Learning, Graph Theory, Digital Signal Processing, Audio and Speech Processing, Mathematical Statistics, Scientific Programming in C++

University of Connecticut, Storrs, CT

GPA: 3.4

B.S. Engineering Physics (Electrical and Computer Engineering Focus)

Graduated May 2018

- Relevant courses: Applied Linear Algebra, Multivariable Calculus, Differential Equations, Partial Differential Equations, Mechanics, Electricity and Magnetism, Statistical & Thermal Physics, Quantum Mechanics, Signals & Systems, Systems Analysis, Optical Engineering, Communication Systems, Semiconductor Devices & Nanostructures

Skills

Languages: Python, C++, Go, Bash, JavaScript, HTML/CSS

Machine Learning: PyTorch, Tensorflow, Kaldi, scikit-learn

Databases: MongoDB, BigQuery, SQLite, ElasticSearch, Weaviate, Lucene

Versioning/Deployment: Git, Github Actions, Docker, Kubernetes, Argo CD

Web: FastAPI (Python), Swagger/OpenAPI, WebSockets, WebAssembly

Metrics: Prometheus, Grafana, LogDNA

Clouds: AWS, GCP, Azure, Oracle, Digital Ocean

Activities

Progressive Coders Network

November 2021 - Present

Volunteer Developer

- Member of ProgCode, a non-profit organization building open-source tools for jflsjfls

UConn Audio/Visual Club

April 2016 - May 2018

Founder and President

- Founder and President of the UConn AV Club, a funded organization on campus, which provides a dynamic environment for peers to collaborate on their audio and visual projects together

Cloudwatch Records

June 2012 - Present

Sole Proprietor

- Manager: Album packaging, distribution, and light marketing for various acts
- Producer: Experience with high-fidelity audio recording and mixing via Pro Tools and Reaper

Member of IEEE and ISCA

Interests

Academic: Speech Processing, Graph Understanding

Sports: Soccer, Rowing, Rock Climbing

Arts: Music, Drawing