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## Education

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### New York University

*Bachelors of Science in Computer Science*

Sep 2020 — May 2023

*Brooklyn, NY*

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## Experience

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### AWS Bedrock

 Software Development Engineer

*Seattle, WA 12/2023 — 01/2025*

**Bedrock:** Creating Generative AI infrastructure for AWS Bedrock. Part of the core team and launched/maintained key features like batch inference, model distillation, and provisioned throughput with AWS-Wide and ReInvent visibility.

### Amazon Last Mile

 Software Development Engineering Intern

*Seattle, WA 05/2022 — 08/2022*

**Data Aggregation Service:** Created a full stack service to visualize last mile delivery data. Created a Typescript React frontend with Polaris styling that calls an AWS backend implemented with Java Lambda Functions, API Gateway, S3, and Internal Amazon Services. Used S3 Select and Spark to filter through about 1TB per query.

### Hewlett Packard Enterprise (Aruba Networks)

 Cloud Intern

*Santa Clara, CA 06/2019 — 08/2019*

**Estimating Bandwidth:** Estimated bandwidth using Auto ARIMA/Prophet and other time series algorithms.

### NYU High Speed Research Network (HSRN)

 Academic Researcher

*Brooklyn, NY 02/2021 — 05/2023*

**Parallel File System:** Deployed an NSF funded 6PB storage PFS (SeaweedFS) for usage internally and externally to the HSRN. Automated Deployment with Ansible Playbooks and Rust CLI. Benchmarked with Bonie++ and IOR.

**Audio Conferencing:** Created an audio service (Portaudio) in C++ that interfaces with internal broker service.

**CI/CD:** Developed documentation, linting, testing, deployment (DinD with Kaniko) pipelines for the project in Gitlab

**Mentorship:** Founder of the student research arm. Managed and onboarded over 110 students over 5 semesters

### Sparkup

 Software Development Engineering Intern

*Brooklyn, NY 09/2022 — 12/2022*

**UX Development:** Implemented a new feature in React Native App to link names and phone numbers in transactions

### Dark Forest

 Graphics Intern

*San Jose, CA 12/2021 — 02/2022*

**Shader Development:** Created a typescript plugin that allows for custom WebGL shaders in the Dark Forest game.

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## Projects

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**Tweet Toxicity:** Used DistilBERT, Pytorch, HuggingFace Transformers, Streamlit and AdamW to classify toxicity type

**Wikipedia Editor:** Used PySpark, Cohere Embeddings, NYU HPC/ SLURM to analyze 6TB of dumps. Found metrics on the breath of topics wikipedia editors touch with LDA and the variance of topics they edit.

**Synesthesia Visualizer:** Auditory Visual Synthesis Visualizer with librosa, yin, eks, flask, docker, blender, WebVR

**Book Recommendation Engine:** Wrote a recommendation engine to group books based on wikipedia page similarity.

**Foot Pedal:** Built a portable guitar pedal using LiPo batteries, teensy 4.0 (and audio shield), LCD, and custom effects

**Electronic Trombone:** Made a trombone midi controller using Arduino with capacitive sensing and pid controllers.

**Circular Buffer:** Wrote a header only circular buffer library in an STL style (e.g. templating, custom iterators).

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## Programming Skills

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**Langs:** Typescript, Javascript, Go, C++, C, Rust, Java, Python, (e)Lisp, Bash/Zsh, Cuda, Kotlin, Perl, Lua, L<sup>A</sup>T<sub>E</sub>X

**Tech:** AWS, Linux, Emacs, QT, Docker, k8s/k3s Rancher, Nginx, Traefik, ReactJS, Tailscale, MongoDB, Postgres, ...

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## Certifications

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AWS Solutions Architect

*September 2021*

AWS Cloud Practitioner

*August 2021*

Stanford Machine Learning by Andrew Ng

*July 2020*

AWS Fundamentals Specialization

*June 2020*