

EXPERIENCE

- **Amazon** Seattle, WA
Applied Scientist 2 *May 2024 – Present*
LLMs and Agents for Alexa+
 - **Evals:** Design and build evaluations to assess Alexa+ as a multi-turn task oriented dialog function calling system
 - **Prompt Robustness:** Build frameworks to test prompt sensitivity of both the system prompt and dialogue context to improve instruction following that supports 15+ international locales over 3M+ utterances per day
 - **Web Agents:** Led an autonomous browser shopping agents project that operate on Amazon.com to help assist customers with their shopping journeyarXiv | *AMLC Agents Workshop 2025 (Oral)*
- **Massachusetts Institute of Technology (MIT)** Cambridge, MA
Research Engineer *Jan. 2023 – Apr. 2024*
Multi-modal transformer models for bio-acoustics
 - **Modeling:** Developed transformer-based models for automatic labeling of whale vocalizations in multi-hour underwater acoustic recordings.
 - **Experimentation:** Ran and managed 100+ large-scale training and fine-tuning experiments on high-performance compute clusters.
 - **Data Pipelines:** Built streaming and ETL pipelines to reduce audio pre-processing time from hours to minutes, boosting throughput for downstream model training.Advisor: Jacob Andreas | CVPR Workshop 2025 | Slides
- **Amazon** Seattle, WA
Research Scientist Intern *Jun. 2023 – Sep. 2023*
Search and retrieval models for grocery substitutions
 - **Ranking and Retrieval:** Built multi-modal retrieval models for substitution recommendations on grocery items predicted to be out-of-stock.
 - **Representation Learning:** Accelerated multi-modal embedding retrieval by 20% via real-time vector search optimization with no drop in accuracy.
 - **Latency:** Engineered systems to support 1500+ QPS with p99 latency under 75ms while improving CTR by 38%.
- **Quantiphi** Bangalore, KA
Software Engineer Intern, Data *Jan. 2021 – Aug. 2021*
 - Developed 30+ pipelines to process telemetry data from solar and wind power plants.
 - Implemented SQL queries for data aggregation, backfills, and gap-filling to generate KPIs.
- **InGo Electric** Bangalore, KA
Software Engineer Intern *Jun. 2019 – Jul. 2019*
 - Built tracking and proximity unlocking features for electric scooters using GPS and data protocols.
 - Developed scripts to dynamically adjust data collection frequency ensuring high tracking accuracy.

EDUCATION

- **Northeastern University** Boston, MA
Master of Science in Computer Science *Jan. 2022 – Dec. 2023*
- **BMS College of Engineering, VTU** Bangalore, India
Bachelor of Engineering in Computer Science *Aug. 2017 – Jun. 2021*

SKILLS, TOOLS & TECHNOLOGIES

PyTorch, Slurm, PySpark, Weights & Biases; Airflow; Faiss, ElasticSearch; Docker, Kubernetes, Python, Java, SQL;