Andrew Ge

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EDUCATION

Northeastern University | Boston, MA

Khoury College of Computer Sciences

Candidate for Bachelor of Science in Computer Science and Mathematics

GPA: 3.99/4.0

Honors: Dean's List – all semesters, Honors Program, Honors Scholarship Recipient

SKILLS

Languages: Java, Python, Javascript, Typescript, SQL, GQL, C++, Groovy, CSS, HTML, Lisp Frameworks: React, PyTorch, Node.js, scikit-learn, Tensorflow, NumPy, SciPy, FastAPI, Django

Tools: Linux, Git, Terraform, Jenkins, Kubernetes, Docker, Azure, AWS

WORK EXPERIENCE

Research Assistant in PARCS Robotics Lab | Boston, MA

Northeastern University

- Initiated a self directed research project to innovate on current work in longitudinal proactive robot assistance.
- Created longitudinal proactive assistance models in PyTorch, matching benchmarks from previous research.
- Cleaned, processed, and shaped new home sensor data to be added as an additional feature into current models.

Quantitative Research Co-op | Boston, MA

July 2023 – Dec 2023

May 2024 – Present

Sept. 2020 - Present

Expected Dec 2024

Morgan Stanley

- Designed 98% accurate client service email grading models with LLM integrated rule based expert systems.
- Deployed these grading models to Amazon Bedrock using Terraform and created an intuitive web interface to run these models through FastAPI, saving team managers 8+ hours each week in manual grading time.
- Created and implemented email data cleaning system into division-wide email centralization service.

President of FirstByte | Boston, MA

May 2022 - May 2024

Northeastern University

- Coordinated with local youth organizations to develop and manage curriculum, promoting interest in CS and STEM for underrepresented communities and students of all ages.
- Organized and led events to build community and enhance professional development for club members.

Dev-Ops Engineer Co-op | Waltham, MA

July 2022 – Dec 2022

Wolters Kluwer

- Provisioned and implemented cloud infrastructure as code using Terraform for evolving application platforms.
- Supported application teams with on call Azure cloud infrastructure support, ensuring optimal performance, reliability, and security of the cloud based applications using Kubernetes and Jenkins.

PROJECTS

Reinforcement Learning Car Racing | Languages – Python

April 2024

- Experimented with RL algorithms (A2C, DDPG, SAC, PPO) to find an optimal approach for self racing agents.
- Developed a custom CNN policy outperforming built-in policy in reward generation by over 400x through batch normalization, feature maps matching input spatial dimensions, and optimizing parameters.

Covey.Town CheckersArea | Languages – Typescript; Frameworks - React

April 2023

- Implemented the backend architecture, optimizing game logic algorithms to ensure an ideal user experience.
- Leveraged React hooks to make seamless API calls for concise data access and proper state management.
- Integrated the CheckersArea into the existing Covey. Town application utilizing the agile development process.

Domainator | Language – Python, SQL

January 2022

- Improved domain analysis efficiency by 40x through automated data pipelines using Nextflow and logic changes.
- Created compiler to convert boolean logic to SQL queries to select protein domains from DNA sequences.
- Implemented a suite of protein matching features giving scientists deeper genome analysis for their research.

ACTIVITIES AND INTERESTS