Andrew Dai

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Available starting September 2022

Education

Northeastern University, Boston MA

Sep. 2018 - May 2022

B.S. in Computer Science, 3.9/4.0 GPA, Honors, Dean's List

Skills

Languages: JavaScript, TypeScript, Python, Ruby, Java, SQL, HTML, CSS

Libraries/Frameworks/Technologies: React, Gatsby, Next, GraphQL, Ruby on Rails, AWS, ElasticSearch, Git, VScode

Professional Experience

Software Engineer Co-op, AppFolio

Jan. 2021 – Jun. 2021

- Developed a dispatch feature that allows operators to make automated robocalls to inform technicians of maintenance requests, greatly reducing the need for manual calls.
- Created a solution to allow clients to view tenant text conversations with maintenance technicians and operators, significantly increasing transparency on maintenance requests for our clients.
- Designed and built a new calendar component to allow clients to easily view and plan which maintenance technicians are available at what times, replacing the manual process of reading and updating a spreadsheet.
- <u>Utilized</u>: TypeScript, React, GraphQL, Ruby on Rails, MySQL

Software Engineer Co-op, PowerAdvocate

Jan. 2020 - Jul. 2020

- Developed a relevance-based search page to help clients easily find the best suppliers to use in supply chain bidding
 events, replacing an outdated SQL search page.
- Constructed an internal pipeline to synthesize data from multiple sources of truth into a single warehouse, using AWS
 Lambdas and Step Functions. The pipeline enabled multiple features on the platform to consume necessary data.
- Led and created a remote onboarding experience for new co-ops, enabling them to quickly integrate and contribute to projects. Worked in with the HR and Technology departments to create remote workshops and bonding events.
- <u>Utilized</u>: JavaScript, Java, React, ElasticSearch, SQL (Oracle DB), AWS (Lambda, Step Functions, Redshift)

Research Assistant, Khoury College of Computer Sciences

Jan. 2019 - Jul. 2019

- Worked with Professor Thomas Wahl and (then) Ph.D. student Peizun Liu to research the potential of a new method for program analysis.
- Created a new tool that uses stack depth bounds to exhaustively search a system's states within bounds.
- Compared the tool with different methodologies developed by the team to assess what properties, programs, and tools
 can more successfully decide on an exhaustive program analysis.
- <u>Utilized</u>: Java, Racket

Personal Experience

Software Developer, SandboxNU

Jan. 2019 – Present

- Develops and maintains SearchNEU, a search platform with over 4,000 monthly users that helps students to better search for courses.
- Designed and engineered SearchNEU Class Pages, a new feature that compiles course information into one location for students, including prerequisites, credit fulfilments, section times, etc.
- Implemented a blue-green deployment model for SearchNEU's Elasticsearch indexes to seamlessly allow index data mapping changes on production without downtime.
- <u>Utilized</u>: TypeScript, React, Next.js, GraphQL, ElasticSearch, AWS (ECS, EC2), PostgreSQL

Peace Through Play, Website Team Lead

Sep. 2019 - May 2021

- Led a team of developers to create a website for Peace Through Play, an after-school community service organization.
- Created workshops for new team members to teach JavaScript, React, and Git to improve developer skills.
- Utilized: JavaScript, React, Gatsby.js

Personal Projects

andrewdai.com

Sep. 2021 - Present

 Designed and developed my personal website using Next.js, JS/React, and deployed with Netlify. Used styledcomponents for styling and typographic design principles for readability.

Adventure Bot Jan. 2020 - Present

- Designing and creating a Discord bot Node.js bot to simulate the role of a DM in a Dungeons and Dragons session.
- Utilizes Discord's JS API to handle commands by players, with the ability to respond to commands and generate simple characters.

Interests: Tennis, Cooking, Science Fiction/Fantasy, Game Design, Mathematics, Board Games, STEM Education