# **Andrew Dai**

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Available starting September 2023

#### 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, C#, Ruby, Java, SQL, HTML, CSS

Libraries/Frameworks/Technologies: React, Vue, Django/DRF, Git, GraphQL, Ruby on Rails, AWS, ElasticSearch, Docker

### **Professional Experience**

#### Software Engineer 1, PathAl

Sep. 2022 - Jun. 2022

- Designed and tested migrations of hundreds of thousands of rows of client ingestion data in order to maintain backwards-compatible data viewing of our new release.
- Developed a new system for handling policy acceptance on the platform, enabling adding new versions and different document types, requiring fresh acceptances, and tracking acceptances.
- Created system design for a view-only user role for developers to use production without risk and to require manual permission raising for better tracking of production. Led design discussions and review with Security and team.
- Utilized: TypeScript, Python, Vue, Django, DRF, Docker

## 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.
- Utilized: 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  events, replacing an outdated SQL search page.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

- 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**

### Project Lead/Software Developer, SandboxNU

Jan. 2021 – May 2022

- Lead SearchNEU, a search platform with over 4,000 monthly users that helps students to better search for courses.
- Designed and developed SearchNEU Class Pages, a new feature that compiles course information into one location
- 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

# Website Team Lead, Peace Through Play

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.
- <u>Utilized</u>: JavaScript, React, Gatsby.js

#### **Personal Projects**

Twisted Towers Nov. 2022 - Present

• Developing a fan-made version of the Tricky Towers game in Unity 2D and C#, with from scratch game management, player controls, spawning, and assets

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