

Allison Colyer - Full Stack Software Engineer

213-293-9818 | allicolyer@gmail.com | www.alli.science | linkedin.com/in/allison-colyer | github.com/Allicolyer

SKILLS

Programming Languages: Dart, Java, JavaScript, TypeScript, Ruby, Python, CSS, Sass, HTML5

Technologies and Frameworks: Flutter, React, React Native, Node.js, Nest.js, GraphQL, Ruby on Rails, Jekyll, Git, Github, Github Actions, Gitlab, Netlify, AWS, Jest, Heroku, Google App Script, Yarn, Webpack

EXPERIENCE

Sweetgreen | Senior Software Engineer | November 2023 - present

- Led architecture decisions to automate file transfer processes using AWS technologies (Lambda, S3, SQS)
- Architected and developed a credit management system, automating workflows and saving hours of manual work
- Built a Nest.js backend microservice for vendor API integration, decreasing third-party dependencies
- Resolved fields for GraphQL types across a federated graph, optimizing data flow in a distributed system
- Ensured high availability and rapid issue resolution as part of on-call rotations, utilizing Datadog for monitoring

Top Hat | Software Engineer -> Senior Software Engineer | August 2020 - October 2023

- Lead Dart developer of Aktiv's organic chemistry app, used in 600+ universities, leading to Aktiv's acquisition by Top Hat
- Developed a proprietary canonicalization algorithm in Dart to uniquely encode any organic molecule drawn by the user
- Implemented efficient graph data structures to give automated personalized feedback to over 500,000 students
- Architected a library of optimized Flutter widgets that cache complex calculations reducing page load speeds by 10x
- Led cross-team collaboration to refactor logic across Flutter codebases reducing developer workload by 50%
- Leveraged TDD (test driven development) to add 2000+ integration and unit tests with 76% code coverage into CI/CD
- Created and executed a six month timeline with milestones to re-architect Top Hat's legacy MongoDB content pipeline
- Identified memory leaks and optimized CPU and RAM usage by 3x in Java processes resulting in cost reduction on AWS
- Utilized Sentry to track bugs, achieving a 1-week average resolution time and reducing bug count by 75%

Technovation | Frontend Software Engineer | January 2017 - August 2020

- Developed and implemented a PostgreSQL database model, storing scores for thousands of students
- Rebranded Django, Ruby on Rails, and Wordpress apps using Bootstrap, Sass, PHP, Grunt, and JavaScript
- Authored computer science, electrical engineering, AI, Arduino, and robotics curriculum for high school students

Recurse Center | Participant | January 2020 - March 2020

- Studied data science, machine learning, algorithms, and backend development at a self-directed educational retreat

PROJECTS

Feelsbot | www.feelsbot.me

Feelsbot visualizes a city's mood using artificial intelligence based on the Tweets from people there

- Developed a server to call IBM's NLP (natural language processing) API to calculate the emotional sentiment of tweets
- Combine data from the Twitter API and Google maps APIs to tabulate the most recent tweets in geographic regions
- **Tech Stack:** React, GraphQL, Node.js, Heroku, Netlify, styled-components, IBM Watson, Vercel, Google Maps API

Magic Compass | <https://www.alli.science/magic-compass-app/>

An iOS and Android Flutter app that features a collection of cute characters to act as a compass needle

- Created in-app purchases that work with both Google Play's API and the App Store API
- Increased store performance through A/B testing, price experimentation, and examining metrics and analytics
- **Tech Stack:** Flutter, Dart, Swift, Java, FlutterCompass, Provider, InheritedWidgets

EDUCATION

The Cooper Union – New York, NY

Bachelor of Engineering, Chemical Engineering

Attended with a full-tuition scholarship valued at \$150,000