Allison Colyer - Full Stack Software Engineer

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

SKILLS
Programming Languages: Dart, Java, JavaScript, TypeScript, Python, CSS, Sass, HTML5
Technologies and Frameworks: Flutter, React, React Native, Node.js, Express.js, GraphQL, Git, Github, Github Actions, Gitlab, Netlify, AWS, Heroku, Flutter Bloc, REST APIs, Google App Script, Jest

EXPERIENCE
Top Hat (formerly Aktiv Learning) | Software Engineer III | August 2020 - Present
• Lead Dart developer of Aktiv's organic chemistry app leading to Aktiv's successful 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 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% in 1 year

Recurse Center | Participant | January 2020 - June 2020
• Studied data science, machine learning, algorithms, and backend development at a self-directed educational retreat

Novvum | Full Stack Software Engineer | January 2019 - January 2020
• Designed a GraphQL database schema and deployed as a Node.js microservice for Novvum's largest client, Greenlight
• Created Novvum's marketing website using Gatsby, styled-components, React, Typescript and GraphQL

Technovation | Frontend Software Engineer | January 2017 - January 2019
• Followed a scrum agile methodology to create a model in PostgreSQL for thousands of students to receive scores
• Rebranded Django, Ruby on Rails, and Wordpress apps using Bootstrap, Sass, PHP, and JavaScript
• Authored computer science, electrical engineering, AI, Arduino, and robotics curriculum for high school students

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

Recurse Roulette | http://www.alli.science/recurse-roulette
Recurse Roulette allows members of the Recurse Center to randomly pair and video chat with each other.
• Deployed a Node.js signaling server that exposes endpoints for matching participants and video/audio sharing
• **Tech Stack:** JavaScript, Node.js, Express, Heroku, peer.js, Sass, WebRTC

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