SARAH MURRAY

Developer. Mentor. Activist.

EXPERIENCE

Mess Design + Development / Cooperate Marketing - Senior Full Stack Software Engineer

MAY 2023 - Present

- As the senior developer assigned to our largest client, Farmers Insurance, I collaborated closely with other developers, QA engineers, and project managers to both deliver new features and maintain the infrastructure of the Farmers® Agency Growth Platform, which is used by millions of insurance agents nationwide.
- Architected and maintained robust RESTful APIs using Django Rest Framework, facilitating seamless data exchange between frontend and backend systems while ensuring performance, security, and scalability.
- Implemented Celery for efficient asynchronous task processing, optimizing background job handling and improving system responsiveness.
- Utilized Vue.js, Nuxt, Pinia, and Tailwind CSS to create dynamic, user-friendly interfaces, enhancing overall user experience and interaction.

AbleTo, Inc - Software Engineer II

AUGUST 2022 - MAY 2023

- Responsible for effectuating a significant increase in UI performance through utilization of optimistic state updates.
- Assisted in putting a novel Redux factory into practice using React, RTX, SQL, and Saga middleware.
- Instrumental in implementing the Pact contract testing framework to ensure cooperation between our microservices' REST APIs.
- Expertise in Test-driven development, Agile methodology, Pair programming, and Continuous Integration/Continuous Deployment.

Drift Net Securities — Senior Software Engineer & Team Lead

NOVEMBER 2020 - JUNE 2022

- Oversaw the development (from beginning to beta release) of our flagship software, KnowWhat: a robust, fully-functional application that gives schools the tools they need to respond to any emergency or crisis in a split-second. KnowWhat was built using React, Redux, and React Router for the front end, Python and Django Rest Framework for the backend, and DynamoDB, S3, and AWS for data management and deployment.
- Responsible for building and leading a highly-qualified team of developers and taking on leadership responsibilities such as: transitioning to an Agile/Scrum

- development model, ensuring technical documentation and functional flow diagrams were up to date, and implementing a JIRA-based ticket system.
- Took ownership of all data acquisition that would be pertinent to our software (for example: scraping Twitter threads for mentions of school violence) using web scraping tools like Selenium, Beautiful Soup, Scrapy, and Splash.

FreeGeek Chicago - Data Analyst & Full-Stack Developer

SEPTEMBER 2017 - OCTOBER 2020

- Conceptualized, researched, designed, and coded a web application explaining the impact of the Chicago criminal justice system as contracted by Smart Chicago, which was built using JavaScript, Vue, Node JS, HTML, CSS, AWS Amplify, and PostgreSQL.
- Collaborated within a team to architect a web crawler utilizing Scrapy, Beautiful Soup, and Selenium. The crawler was engineered to identify "extremist" language within social media posts across platforms such as Facebook, Twitter, and Reddit. Compiled pertinent text and metadata into an API for subsequent utilization in diverse data analysis methodologies.
- One application, The Circuit, saw our team synthesize data from multiple sources to track the population of Cook County Jail over time and summarize trends.

NogginLabs, Inc - Software Architect

AUGUST 2015 - DECEMBER 2016

- Along with award-winning designers and writers, coded creative e-learning web applications and adapted solutions according to clients' needs.
- Used JavaScript frameworks, such as Backbone and Marionette, and libraries such as GreenSock Animation Platform to make creative, interactive, engaging activities.

Cook County Sheriff's Office - Data Analytics Summer Fellow

JUNE 2015 - AUGUST 2015

Chicago Tribune — News Applications Intern

JUNE 2014 - AUGUST 2014

OPEN SOURCE + PROJECTS

The Rec Room — iOS & Android Application (Work in Progress)

DECEMBER 2023 - Present

- Conceptualized, designed, and built a social platform from the ground up for sharing and discovering books, music, movies, and TV shows.
- Self-taught React Native/Expo for app development, integrated Firebase for storage, and implemented Clerk for secure authentication. Created app prototypes, database schema, and user flows using Figma.
- The Rec Room is the ultimate solution for transforming media recommendation lists into meaningful connections and conversations. Key features include personalized recommendations with one-tap sharing to friends and groups, media tracking for suggestions received, experiences completed, and source attribution, and community engagement through live chats and shared interests.

Bayanat — Syria Justice and Accountability Centre

FEBRUARY - NOVEMBER 2023

- As a hired volunteer, contributed to Bayanat, an open-source platform developed by the Syria Justice and Accountability Centre (SJAC) using Flask, PostgreSQL, NGINX, Redis, and Celery to enhance tools for documenting human rights violations and supporting transitional justice efforts.
- Participated in 2023 platform updates, including the redesign of the user interface dashboard, improvements to search functionality, and development of a data export tool for streamlined reporting and analysis.
- Aided in developing the Component Data Management tool, enabling administrators to customize Bayanat systems to specific contexts or investigations, enhancing the platform's security, efficiency, and user experience.

RELEVANT SKILLS

- Programming languages: Python, JavaScript, TypeScript, Ruby, HTML, CSS, SQL
- Frontend frameworks: React, React Native, Redux, Vue.js, Vite, Ruby on Rails, Gatsby, Svelte, Tailwind CSS, Sass/Less
- Backend & Database frameworks: Django, Django REST, PostgresQL, Flask, Node.js,
 Celery, Kubernetes, AWS (DynamoDB, S3, Amplify, EC2, SNS/SES, & Lambda)
- Test-driven development using Jest, React Testing Library, Mocha, Pact
- Completed a certification course in Agile and Scrum methodologies
- Version control using Git and CI/CD management using Gitlab and Amplify
- Technical writing, including Architecture & Design Documents, test plans, functional flow modeling, and end-user documentation

EDUCATION

DePaul University - M.S. in Mathematics

AUGUST 2017 - DECEMBER 2019

- Master of Science in Mathematics
- Graduated with distinction, Cum Laude

Loyola University Chicago — B.Sc. and B.A.

AUGUST 2010 - JUNE 2014

- Bachelor of Science in Computer Science, GPA: 3.7
- Bachelor of Arts in Digital & Visual Journalism, GPA: 3.9
- Graduated with distinction, Magna Cum Laude