

Ian Murray - Senior Software Engineer

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SKILLS

Languages:

Ruby, Go, JavaScript, Scala

Persistence Layers: PostgreSQL, MongoDB, Cassandra, Redis, Parquet

Frameworks and Libraries:

Rails, ActiveAdmin, RSpec, Ruby-Grape, NATS, Node.js, Apache Spark, Spark SQL, RabbitMQ

Cloudhost Technologies:

Heroku, Codeship, AWS (Lambda, Fargate, SQS, Kinesis, APIGateway, S3), GCP BigQuery, DigitalOcean

EXPERIENCE

FULL-STACK DEVELOPER – SpotOn

June 2019 – Present

- Rebuilt a legacy Spark/Scala traditional ETL with a serverless Go-based real-time streaming ETL, reducing typical data latency by 80% and allowing for automated scaling under heavy load
- Implemented a cross-platform payment processing integration for Restaurant POS, coordinating internal teams across Android, Web, and Server-based platforms along with 3rd-party teams at PAX and TSYS
- Restructured the storage, transportation, and editing of labor data across three (formerly separate) internal platforms to allow for a shared “source of truth” and consolidated payroll processing for our customers

CONSULTING SOFTWARE ENGINEER – Gamer Sensei

May 2019 – Present

- Identified API endpoints causing significant memory consumption issues, then refactored and optimized the queries used in these endpoints, resulting in an 80% reduction in request/response time for the most affected users, and a 50% reduction in application memory usage during periods of typical load
- Implemented several platform-wide security measures including automated account-locking, rate-limiting, and IP block/allow-lists to protect against brute-force attacks and referral abuse

BACK-END SOFTWARE ENGINEER – Gamer Sensei

May 2018 – May 2019

- Redesigned the user notification system to integrate communications and add granularly multiplexed notification preferences across email, slack, discord, and internal messaging systems
- Added integration of AmazonPay to the payment system, and built a system to handle conditionally-aware “hard” and “soft” refunds, integrating with the Stripe and Paypal APIs for “hard refunds”
- Built a system that spiders through the Riot Games API to transform and store data from hundreds of millions of match records into a NoSQL database, leveraging a traditional ETL and API microservices to serve aggregated data to web and chat-based consumers
- Built a user authentication system, and an API to receive, validate, and store incoming match data from an in-house First-Person Shooter game, as well as a leaderboard and achievement system that integrates with the Steam developer API

BIOLOGICAL RESEARCH ASSOCIATE – Bradham Lab, Boston University

Sept. 2011 – Oct. 2014

- Researched and developed a computational model of the gene regulatory networks that direct skeletal patterning in sea urchin embryos
- Automated several labor-intensive workflows involving genomic data processing and aggregation, and image editing
- Developed experimental strategy and new methods, analyzed results and large-scale genomic data, trained new researchers, and oversaw biosafety level 2 compliance as the Lab Safety Officer

EDUCATION

Boston University – Boston, MA

Graduation Year: 2014

Bachelor of Arts (BA) in Biochemistry and Molecular Biology with Distinction

Cum Laude, National Merit Scholar, George R. Bernard Jr. Scholar

OTHER INTERESTS

Dungeons and Dragons | Alternative ice cream | Homebrewing | Mushroom cultivation