

# Liam Ellis, Senior Software Engineer

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**SUMMARY** I'm a senior Fullstack developer with 7 years of experience leading teams and initiatives in the design and implementation of internal and external APIs, cutting edge web applications as well as infrastructure-as-code and serverless cloud architectures. I'm committed to facilitating the union between operational KPIs and elegant software solutions.

**EXPERIENCE** **Senior Software Engineer** | Freeman, NY, NY 2019 - Aug 2022  
*Lead Fullstack Developer*

- Developed the CRUD and RESTful architecture for the application's core database models.
- Architected the application's authentication and authorization layer (front/back), securing access to the API.
- Built an API key feature (front/back) allowing admins to generate keys granting entity level permissions for programmatic access to the core API for internal client integrations.
- Oversaw the architecture of the frontend React (Typescript) application utilizing technologies like React Query, Hooks and the Context API.

*Project Lead Developer*

- Developed the core application API in GraphQL (Apollo Server) using DynamoDB in the underlying data layer.
- Built the corresponding query layer and state management architecture for the frontend React application using the Apollo client and the React Context API.
- Designed and developed a robust AWS Lambda microservice architecture to support the custom automation suite responsible for packaging and deploying event data and in-app configured chatbot settings to a dynamically generated Lex or Alexa bot in just a single click.

**Senior Software Engineer** | OMG, NY, NY Sept 2018 - 2020  
*Project Lead Developer*

- Led the end to end construction of an enterprise web application for the company's largest real estate client.
- Implemented a fullstack search and filter feature for listings results complete with custom map and location visualization components using the Google Maps platform.
- Developed a microservice architecture responsible for integrating several external APIs, including polling certain 3rd party data sources efficiently to keep listings up to date.
- Designed an ETL service for transforming the response anatomy from the all relevant data sources for uniform consumption in a federated GraphQL API.
- Built custom 3rd party CMS integrations to keep content synced across data sources.

#### *Lead Frontend Developer*

- Lead the development of a custom component library built with React (Typescript), Styled Components and Storybook for a greenfield employment/staffing legacy application rebuild.

#### *Lead Shopify Developer*

- Lead the performance audit and upgrade effort for the Matsuda eyewear company reducing page load times by 40%.
- Implemented high fidelity, high fashion mockups into pixel perfect, mobile optimized Liquid/HTML/SCSS markup.
- Built custom cart and checkout logic and inventory functionality for unique inventory constraints requested by the client.
- Developed complex media animations and orchestration alongside the design team.

#### **Lead Frontend Developer** | IF Studio, NY, NY Mar 2018 - Sept 2018

- Elevated productivity through the introduction of company wide project management workflows and centralized development task tracking.
- Implemented the company's first CI/CD delivery and DevOps pipeline which successfully transitioned the company from a zero to 75% autonomous deployment architecture.
- Designed, constructed and deployed 6 stylish, cutting edge, production grade web applications in React and PHP.
- Authored development proposals resulting in the acquisition of the company's largest client to date.

#### **Fullstack Developer** | Hi Karl, Remote Mar 2017 - Dec 2017

##### *Lead Frontend Developer*

- Developed a search algorithm for music concerts within the company's Facebook Messenger chatbot. The location based results were mapped, plotted and visualized using the Mapbox library and rendered within the chat interface using custom webview templates built in React.
- Assisted in the development of the Hi Karl NLP suite and related chat application logic in Python.
- Developed membership, subscription and ticket redemption functionality using QR code processing for in-app purchases.

#### **Shopify Developer** | Befine Skin Care, Remote Jan 2016 - Mar 2017

- Developed a custom Shopify ecommerce platform built with Javascript, Liquid, HTML and SCSS.

- Developed SEO, MailChimp, and digital marketing integrations leading to a 30% increase in shopping cart conversions.

**SKILLS**      Typescript, Javascript, NodeJS, React, NextJS, GraphQL, Apollo, Okta, Express, REST, Serverless Framework, Python, Flask, Microservices, Event Based Architecture, AWS CDK, AWS Platform ( IAM, AWS CLI, Data Pipeline, Elasticache, API Gateway, AppSync, Amplify, Lambda, EC2, S3, Cognito, Lex, Alexa, SNS, SQS, DynamoDB, RDS, CloudFormation, CloudWatch), DevOps, Docker, Styled Components, SQL, Postgres, SQLAlchemy, Redis, Netlify, Vercel, Heroku, Travis CI, CircleCI, Github Actions, Shopify, Liquid, Linux, Unix, Solidity, Truffle, Ganache, Remix, Smart Contracts, dApps, Web3

**PROJECTS**      **CTO, Co-Founder** | Soundpruf, Remote      Nov 2018 - 2020

- Using the Spotify API as both an authentication layer and datasource, I developed a custom monitoring platform to harvest and analyze our application users' Spotify streaming history.
- Built a novel reporting and data visualization service for our gamification layer. Comparing each user's personal metrics against other users across shared artists and genres. This allowed for unique competitive insights between users and was fundamental to the application.
- Developed an initial POC blockchain in Python as an off-network ledger exposed through a Flask REST API.

**EDUCATION**      **Epicodus** | Fullstack Immersive - Portland, OR  
*Ruby, Rails, SQL, NodeJS, React, Java*

**General Assembly** | Front End Development - NY, NY

**StartUp Institute** | Intro to Ruby - NY, NY

**University of Minnesota, Twin Cities** | B.A. Anthropology, 3.8