# **Mark Osman**

# **Software Engineer**

(913) 302-8379 markrockwellosman@gmail.com Portfolio LinkedIn Github Kansas City, MO

#### **Skills**

Languages: JavaScript, Python, SQL, HTML, CSS, R, SPSS

Frameworks / Tools: React, Redux, Redux Toolkit, Flask, Node.js, Express, Git, Docker, AWS, PostgreSQL, SQLAlchemy, MySQL, Sequelize, Pandas, Numpy, Matplotlib, Mocha, Chai, Jest, Pytest, Git, Github, Linux / Unix, Agile Development & Scrum

### **Education**

App Academy Jan 2022 - July 2022

Highly selective (< 3% acceptance rate) immersive 1000-hour full stack software development program. Coursework included pair
programming, Object-Oriented Programming (OOP), Test Driven Development (TDD), data structures & algorithms, design patterns,
REST, coding style, programming best practices, security, single-page apps, scalability, APIs, UI / UX design</li>

#### **Texas Tech**

Master of Business Administration - Information Technology

July 2020 - Dec 2021

Relevant graduate-level coursework: Python & Scripting Languages, Database Concepts and Design, Agile Project Management

#### **Kansas University**

Bachelor of Science, Cognitive Psychology

July 2008 - Dec 2011

### **Relevant Experience**

St. Edmund's Retreat

IT Director Nov 2019 - July 2021

- Overhauled aging systems, infrastructure, and outdated business processes. Developed and implemented strategic plans for technical needs that met and exceeded organizational goals. Drove decisions for the direction of operations.
- Managed multi-stage implementation of technological changes and system enhancements to business processes, policies, and infrastructure to create efficiencies and optimize organizational value chain. Led migration to cloud-based SaaS platform for program creation, online booking management, and end to end payments. Designed and analyzed custom reports and created cross-platform integrations for data migration of over 30,000 constituents.
- Created new partnerships with marketing and development teams to maximize the potential of various IT platforms, services, and tools
  to increase audience reach and achieve fundraising goals.
- Developed and launched a 'virtual community' web platform as a subscription service, including new live-streamed programming, new
  interactive Zoom events and discussion groups. Designed and oversaw buildout of onsite video production studio to create online
  content. Managed and maintained website.

# **Personal Projects**

rFlix (JavaScript, React.js / Redux.js, Python / Flask, HTML5, CSS3, PostgreSQL, Docker, AWS)

Live Site | Github

A single-page video streaming platform that features a Netflix-inspired UI/UX and adds community interaction via customizable profiles and user comments

- Leveraged Flask session object to allow for account-sharing and secure session recall while maintaining persistence of current profile in user's browser to allow for multiple active profiles on a single user account.
- Integrated AWS S3 buckets for video and image hosting.
- Utilized React-Player library in conjunction with AWS to reduce server load and provide users a seamless, uninterrupted streaming experience. Integrated customizable profile settings to allow enhanced user experience.

lofidelity (JavaScript, React / Redux, Python / Flask, HTML, CSS3, PostgreSQL, Docker, AWS)

Live Site | Github

An online music community where passionate lofi fans discover, connect with, and directly support the artists they love.

- Collaborated with a team of 4 engineers, utilizing efficient git and pull request workflow in order to minimize potential merge conflicts across the stack and maximize sprint productivity.
- Configured AWS S3 for user image and song upload and to provide high-quality streaming audio experience to end users.
- Created tiered user roles so users can create accounts with different permissions to interface as a fan/listener or as an artist.

**BetterNote** (JavaScript, React / Redux, Node.js, Express.js, HTML, CSS, Postgres, Sequelize, Heroku) A single page full-stack application for note-taking and organization.

<u>Live Site</u> | <u>Github</u>

- Utilized Redux architecture's unidirectional data flow with React for predictable state and reliable DOM rendering, as well as efficient rendering of search results by query filter.
- Created custom modal and various reusable React components allowing for efficient development of new forms.
- Configured Express backend with PostgreSQL, using Sequelize ORM for validations and database queries with CRUD functionality and RESTful API routes.