# Kenneth Orsini

Software engineer with full stack experience and a focus on web application development including frontend development, backend development and database management.

#### **Skills**

#### Soft Skills

- Constructive Feedback
- Problem Solving
- Critical Thinking
- Team Management

## Languages

- JavaScript
- TypeScript
- C#

#### **Frameworks**

- React
- Angular
- NestJS/Express
- .NET

#### Other

- Node.js
- SQL & NoSQL
- Jira
- Git

## **Education**

MAY 2022

**B.S. Software Engineering / Florida Gulf Coast University** 

# **Experience**

SEP 2021 - MAY 2022

## **Software Development Intern / CallMiner**

- Worked on a team of four to develop a full stack web application using Angular, .NET, and MongoDB.
- Adhered to Agile methodologies under the guidance of a Scrum master and with the use of Jira.
- Attended regular standup and stakeholder meetings to elicit/review requirements and make design decisions.
- Used Git for version control and utilized main, development, and feature branches to isolate new code as it related to tickets from Jira.
- Managed frontend state using Angular services and the observable design pattern.
- Used the ASP.NET web framework for our Rest API and created all necessary end points for required server functionality and database communications.
- Used Firebase Authentication for our user account system and integrated it with our frontend and backend.
- Implemented a role-based authentication middleware on our backend for specific routes to separate user and admin functionality.
- Implemented a custom error handling and logging middleware to protect the server application from crashes and to track malicious events.
- Modelled and documented our database to meet business needs.
- Created a swagger document for our API to benefit future development and maintainability.
- Containerized our frontend and backend applications using Docker.

# **Key Projects**

## FloriNouns / Sponsored by FGCU

Technologies Used: React, Web3.js, Factoria F0, Ethereum

FloriNouns is an FGCU affiliated NFT collection with transactions supporting a university managed DAO. The application is currently in production where purchases are supporting the Dunk City DAO and future blockchain projects from the university.

- Worked as team leader on a team of 6 students to develop a decentralized app with React and deploy a smart contract to the Ethereum blockchain.
- Used React Hooks and the context API to manage global state, opting for local state where possible for better performance.
- Created custom hooks for communicating with the smart contract using the Web3.js package.
- Utilized code splitting and lazy loading to reduce bundle sizes and improve performance.
- Set up a deployment pipeline on our repository for automated building and deployment.
- Generated metadata files for various images supplied by student artists for the NFT collection.
- Hosted collection files on IPFS, and utilized Google cloud bucket storage for displaying images on the web app.
- Deployed a custom Factoria F0 contract to Ethereum Mainnet which served as the backend of the project.

## **Activity Calendar / Inclusion UI**

Technologies Used: VanillaJS, Electron, Node.js, SQLite

Inclusion UI is a volunteer development organization whose goal is to create applications for users with learning disabilities.

- Worked on a team of 5 full-time developers and a project manager to develop a desktop application.
- Took part in critical design decisions to preserve existing code and meet the client's requirements.
- Worked under unique accessibility constraints to meet the needs of targeted users.
- Worked in pair programming sessions with other developers on the team regularly.
- Primarily worked on the backend of the project which used electron and included database management.
- Used Sequelize as an ORM to communicate with an SQLite database and to create database schemas.
- Created an API which read from and wrote to the user's file system using file paths stored in the database.
- Implemented features such as custom drag-and-drop and animations in Vanilla JS.

### Neurologica VR

Technologies Used: Unity, Express.js, Node.js, MongoDB

- Worked with one other developer to create an educational virtual reality application using Unity and an Express/Node.js REST API.
- Rolled our own user authentication system using Passport.js, bcryptjs, and JWT technology.
- Integrated an SMTP service to send emails to users from the server about user account changes and updated quiz scores.
- Created a static site using bootstrap which is hosted by our server application and contains information about the project including API documentation.
- Used Jira to manage project tasks and milestones.