# Ryan McPherson

**Email**: ryan7mcpherson@gmail.com • **LinkedIn**: R-McPherson **Github**: RyanMcPherson7 • **Website**: ryanmcpherson.info

## **Education**

### University of Florida, B.S. Computer Science

August 2020 - Present

- Relevant Coursework: Data Structures and Algorithms, Discrete Math, Computational Linear Algebra, Intro to Software Engineering, Intro to Computer Organization, Information and Database Systems
- **GPA:** 3.81/4.0

#### Skills

- Frontend: Angular, React, JavaScript, TypeScript, Sass, Bootstrap, HTML, CSS
- Backend: Node.js, NestJS, Express.js, MongoDB, Firebase, Firestore, C++, Java, Python
- Other: Docker, Git, GitHub Actions, Jest, Solidity, Agile, Scrum, Affinity Designer

# Experience

## **Software Engineer Intern | UKG (Ultimate Kronos Group)**

May 2022 - August 2022

- Developed with an Agile team on an internal tool used by 50+ QA engineers across 40+ teams using a microservices architecture, Angular, NestJS, MongoDB, and Kafka
- Collaborated with 3 engineers on a new Angular UI MVP by submitting 12 pull requests which added various components, services, and views to offer more customizability to users
- Implemented a NestJS service to create thousands of documents in MongoDB to store incoming data that expires after 90 days to optimize storage costs on no longer needed data
- Investigated 17 user stories, contributed 3,000+ new lines of code, and merged 19 pull requests across 3 backend services and 1 micro frontend service

## Web Developer | Shamrock Auto Trim

January 2022 - February 2022

- Redesigned and implemented the company website using React, Bootstrap, and modern UI/UX design principles to improve accessibility and responsiveness
- Drove up the average user's time spent on the website by 150% as a result of the redesign

#### **Tech Lead | UF Software Engineering Club**

September 2021 - August 2022

- Collaborated with an Agile team on a mobile app built using React Native, Node.js, Express.js, and MongoDB that
  offers a single platform where all college clubs and activities are displayed
- Implemented a data scraping feature to populate the app with events from other platforms like Google Calendar resulting in a 200% increase in content on the app

# **Projects**

#### Solo Software Engineer | Six Degrees of Spotify

December 2021 - August 2022

- Developed a full-stack web app that finds how connected 2 music artists are using React, Node.js, Express.js,
   Docker, and Spotify's web API; visit at <a href="mailto:sixdos.herokuapp.com">sixdos.herokuapp.com</a>
- Engineered a RESTful API to compute shortest paths using breadth-first search (BFS) which reduces the time it takes to find how related 2 artists are from hours to milliseconds
- Constructed a continuous integration/continuous deployment (CI/CD) pipeline with 100% server code coverage
  using GitHub Actions, Docker, Heroku, and Jest which saves ~30 minutes of manual testing and deployment per
  pull request

#### **Lead Software Engineer | Push Pin**

**February 2022 - April 2022** 

- Organized and led an Agile team of 4 developers in building a full-stack web app that enables educators and event organizers to connect online with their audience via virtual bulletin boards
- Implemented user authentication, page routing, database document creation/deletion, and global document search using React, Firebase, and Firestore
- Upgraded database protection rules to require both authentication and authorization to prevent injection attacks and data fraud