

Hagen O'Neill

Deland, Florida

✉ hagenoneill@gmail.com

☎ (386) 624-5459

EDUCATION

University of Central Florida

Bachelor of Science in Computer Science

Orlando, FL

Expected Winter 2023

KEY SKILLS

Languages: Java, C, C++, C#, SQL, React-JS, Python

Environments: .Net, REST API Development, Unity, ARCore, ARkit, Android Development

Tools: Azure DevOps, Jira, MS Office Suite, Docker, TensorFlow, PyTorch, Figma, Homebrew

Other: Agile, Computer Vision(Open CV), Statistics, Data Analysis, Business Fundamentals

EXPERIENCE

Microsoft

Program Manager Intern

Seattle, WA

May 2022 - Jul 2022

- Coordinated architecture collaboration between teams, saving 6+ weeks of engineering time
- Identified the "best" direction for our team's product based on user needs and clarity of goal
- Advocated for this direction, gaining alignment and excitement across PMs, Designers, and Engineers
- Coordinated collaboration with Azure Remote Rendering to leverage their work for this new direction

Tesla, Inc.

Product Manager Intern

Fremont, CA

Apr 2021 - Aug 2021

- Worked with target users/stakeholders to gather and document requirements and aggregate needs
- Designed a solution which met these needs and iteratively refined it based on stakeholder feedback
- Obtained enthusiastic buy-in from management and other stakeholders
- Worked with SWEs to prototype and implement early versions of the solution to add immediate value
- Resulted in \$4.5 million annually in time saved and additional design error reduction
- Repeated these steps (in parallel) for an additional project focused on cost data analysis

O'Neill Industries, LLC

Founder, Product Manager, Full Stack Developer

Deland, FL

Jan 2019 - Mar 2020

- Founded a startup to create an application to facilitate and monetize personal service-based interactions
- Implemented Agile to manage a group of 5 people to create and iterate on an MVP
- Authored an accompanying business plan addressing target demographic, scalability, costs, etc.
- Organized about 50 test clients from target demographic for a Proof of Concept and user feedback
- Presented successful PoC results and business plan to VC Firm in Atlanta
- Deal fell through due to Covid-19 directly impacting the nature of our application

PROJECTS

Autonomous Lion-fish Remover

Jan 2021 - Present

- Working in a group to design and build an autonomous submersible vehicle to remove invasive lion-fish
- Personally managed a group of contributors from different disciplines to accomplish our goals
- Personally implemented and modified ORB vSLAM to allow the sub to localize itself in its environment
- Worked with the EPA to develop and refine the use cases and adjusted the design accordingly

AR Piano Hero

Dec 2020 - Jan 2021

- Built an Augmented Reality Application that detects a piano keyboard and overlays a keyboard in 3D space; note blocks then fall down on the keyboard and the user plays along on a real piano
- Goal is similar to "Guitar Hero" but used to learn to play a real piano
- Trained TensorFlow model to detect a piano keyboard and place a bounding box around it
- Used a Sobel Filter and my own Line Detection Algorithm to find the corners within the bounding box
- Used those corners to place the keyboard in the 3D space without user input
- Built a file handler to convert MIDI files into a CSV file that the app can read and display
- Tested with users and iterated the experience according to feedback