Timothy Oei - Resume

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Education

University of Central Florida - B.S. in Computer Science with Honors   **Expected Graduation: May 2024**

Work Experience

Meta/Facebook - Software Development Intern (Hack/PHP, JavaScript, Python, SQL)   **May - Aug 2022**
- Increased ad demand coverage, revenue, and impressions by 5,1%, 4.9%, and 2.5% respectively by onboarding lead generation ads to Facebook Business Explore surfaces and Ads Manager
- Proposed and designed a new dashboard to monitor ad creation metrics and reveal ad demand patterns by building a data pipeline with SQL and Python
- Prevented feature regression by designing a QA plan for manual validation and writing functional, mock, and e2e tests

Lockheed Martin - Software Development Intern (C++, CMake)   **Oct 2021 - Feb 2022**
- Worked in an agile environment to build embedded software for photoelectric sensor components
- Wrote unit tests to prevent regression from mistyped values when modifying configuration files

Boeing Intelligence & Analytics - Software Development Intern (Python, React, Jenkins, AWS)   **Jun - Aug 2021**
- Developed a full-stack machine learning application for extracting and linking entities from millions of news articles and text documents to form business relationships and insights
- Reduced time to move new features into production by 88% by creating a CI/CD pipeline with AWS and Jenkins
- Enabled CRUD operations for the database by building a REST API using Flask and schemas using Mongoose

Relevant Activities

Parallel A* Algorithm Implementation & Applications Research Paper (C++, Unreal Engine)   **Jan - April 2022**
- Reduced execution time of a simple maze game solver in Unreal Engine from 43s to 59ms by parallelizing the A* algorithm
- Supported the parallel algorithm implementation by designing concurrent data structures

KnightHacks Software Development Club - Mobile Development Team (TypeScript, React Native)   **Aug - Nov 2021**
- Developed a cross-platform, event management app to support the club's annual hackathon with 500+ attendees
- Gathered and implemented user requirements for UI components from Figma mockups using React Native and TypeScript

Interactive Systems and User Experience Lab - Undergraduate Researcher (C#, Unity)   **Feb - Dec 2021**
- Automated a researcher's data collection process by writing a C# script in Unity to record and visualize the positional and rotational coordinates of a subject's hand joints
- Designed and built virtual and augmented reality environments in Unity for conducting user studies

Mater Computer Science Club - Founder/President (Java)   **Aug 2019 - Jun 2020**
- Increased the school's AP Computer Science exam passing rate by 28% by teaching foundational programming and object-oriented concepts in Java and Scratch
- Partnered with Nova University's Cyber Lab to deliver educational cybersecurity workshops to ~200 children ages 12+

Skills

Languages: C/C++, Python, JavaScript/TypeScript, Node.js, HTML, CSS, SQL
Frameworks/Libraries: React/React Native, Express, Pandas, NumPy, Scikit-learn, Matplotlib/Seaborn
Tools: Git, Linux, Figma, Unity, PostgreSQL, AWS