

# Maxwell Oakes

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## Education

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### Master of Science, Computer Science

Mar 2021 – Mar 2023

*Portland State University*

- 4.0/4.0 GPA; Phi Kappa Phi Honor Society
- Relevant Coursework: Database Management Systems, Fullstack Web Development, Unit Testing, Software Testing and Implementation, Internetworking Protocols, Computational Imaging
- Relevant Technical Skills: Python, HTML/CSS, JavaScript, React, SQL (PostgreSQL), C#, Github, Unit Testing

### Bachelor of Science, Computer Science

Aug 2013 – May 2017

*University of Portland*

- 3.28/4.0 Overall GPA; 3.41/4.0 Major GPA
- Relevant Coursework: Analysis of Algorithms, Programming Languages, Data Structures, Object-Oriented Design, Remote Sensing & GIS
- Relevant Technical Skills: Java, C#, C/C++, SQL (MySQL), ArcGIS

## Experience

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### Programmer Analyst 1

Jun 2023 – Current

*Marion County | Salem, OR*

- Converted several dozen legacy Microsoft Access-based reports and queries into SQL Server Reporting Services (SSRS) reports, giving county employees a more consistent and modern user experience
- Assisted in data integrity and consistency patches for MS SQL, increasing the quality of future data and reducing possibilities of future issues

### Administrative Coordinator

Sept 2018 – Dec 2020

*Orbis Education | Portland, OR*

- Wrote a variety of programs in Python to automate previously tedious tasks, frequently saving several hours of work per week
- Developed academic calendar used by over 400 concurrent students across multiple locations
- Created workflow of all tasks performed by administrative team, allowing for timely task allocation in a growing nursing program
- Collaborated with 2 other education coordinators to ensure 120 incoming students per semester were in compliance with mandatory hospital clinical site safety and vaccination standards

### Student Web Developer

Nov 2016 – May 2017

*University of Portland | Portland, OR*

- Designed and maintained multiple MVC architecture Java web applets that were used by university tutoring faculty and prospective students
- Convened with university faculty to outline requirements for new web applications
- Improved existing Java web applets by identifying and fixing several bugs and adding functionality

## Projects

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### James Webb Space Telescope Spectrum Analyzer, Solo Creator

Winter 2023

- Created a Python program to download and combine James Webb Telescope infrared imaging data
- Utilized Python's scikit, NumPy and Astropy libraries to manipulate and combine image layers

### Asteroid Visualizer, Solo Creator

Winter 2023

- Created frontend and backend for a website that displays orbits of asteroids using 3D rendering in the web browser

- Utilized THREE.js and React for the frontend, and Typescript, PostgreSQL and C# on the backend, and containerized using Docker