# Shane Clancy

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## Objectives

Passionate about development of systems design, back-end development, optimization, machine learning, numerical analysis, and developing software and solutions to a wide range of problems. Looking for software engineering positions at the entry level.

## Education

**Oregon State University**                  **BS Computer Science Systems with Minor in Mathematics**
*3.50 GPA*                                                                            *June 2020 Expected*

## Work Experience

**Student Programmer/Analyst**                                         **August 2019 - Present**
*Oregon State University Graduate School*

Worked on a team of student programmers, full-time software engineers and graduate faculty. Contributed to and gained experience leading projects throughout the software development lifecycle from requirements gathering to release and maintenance. Developed OOP applications in Salesforce's PAAS environment with attention to shared tenancy constraints. Used git to develop features in a repository shared by the entire university and GitHub issues, projects, milestones and pull requests to track progress and integrate changes. All work is unit tested to meet the platform's required code coverage in order to deploy to production. Followed modified Agile development methodology. Notable Projects:

- **Graduate Digital Program of Study**
  - Developed software to provide over 3,500 graduate students tools for their Program of Study following model-view-controller (MVC), object-oriented programming (OOP), and designed unit tests for each component.
  - Built the application to meet the unique needs of over 80 programs, and support scalable customization.
  - Replaced paper-based and error prone system with system that verifies requirements based on degree.
- **Program of Study Requirements Builder**
  - Developed system in which graduate school faculty could build out a set of requirements for their students to follow when creating their digital program of study.
  - Worked with translating data to and from an SQL database to a model-view-controller architecture, as well as working with a custom language parser used to verify requirements.
  - Verified and expanded the requirements for the project with clients and project coordinators.

## Notable Projects

**Gesture Recognition using Intel Real Sense Depth Based Camera**

Current project in which I am working in a team of 5 other people to create a machine learning algorithm in order to classify and display in real time, American sign language gesture translations. I have worked on the data preprocessing and machine learning integration portions of the project as well as coordinated project workflow.

**Weather Information Visualization Project**

This project displays data for the most populated cities in the United States, from a third party weather API. User can make queries over the data to from a front-end website to match certain ranges, such as state, city, months of the year, average high/low temperatures, and rainfall. This project uses the Google maps API to display the cities that matched the users queries and gave each result its specific page with a 5 day forecast as well as all of the months of the year that had matched the user's query.

**Sudoku**

This project is a React based web application that lets the user play Sudoku. I used this project to teach myself the basics of React and component driven web development. The user is allowed to select different difficulties and place different tiles on the screen. I also used this project to explore web hosting, and decided to host my project on GitHub pages at the following link: https://shaneclancy.github.io/sudoku/

## Technical and Personal skills

- **Programming Languages:** Java, C, C++, Python, Apex, JavaScript, SQL, Assembly, MATLAB.

- **Industry Software Skills:** Git, numpy, scipy, PyTorch, React, Salesforce, Lightning Web Components, LaTeX, Android, Linux, and Windows.

**References available upon request**