# TODD M. STALLWORTH

# SOFTWARE ENGINEER

## CONTACT

(360) 846 - 8504

**Email** 

Renton (Washington)

**in** LinkedIn

Portfolio Website

## SKILLS

Python - Django, Flask, Pandas, NumPy, Pytest

JavaScript - Expres.js, Angular.js, Node.js, NPM

C/C++

HTML & CSS

Database - SQL, MongoDB, PostgreSQL

Docker

Shell Scripting w/Bash

CI/CD Pipeline Automation w/ Selenium

**AWS** 

Computer Architecture, Data Structures & Algorithms

Git/Github

Windows and Linux

EDUCATION

CERTIFICATION AWS Training Math for Machine Learning Amazon Web Services March 2023

CERTIFICATION Algortithms, Data Structures, System Design AlgoExpert.io March 2023

CERTIFICATION
Automated Software
Testing w/Python
Udemy
March 2020

CERTIFICATION Full Stack Developer Coding Dojo 2018-2019

ASSOCIATES DEGREE General Studies Big Bend Community College 2010-2012

#### EXPERIENCE

Software Engineer

Certifit | Renton | December 2021-November 2022

Design, deploy and manage Continuous Integration system.

- Develop, design, and test high-quality software features for the company's web-based application using Python, Django, and PostgreSQL.
- Implemented a comprehensive test suite using Pytest, resulting in a 30% increase in test coverage and a 50% reduction in bugs.
- Collaborate with cross-functional teams in agile development environments, participating in daily stand-ups and bi-weekly sprints.
- Increased test coverage by 20% by automating multiple test cases using the selenium library identifying and reporting 50+ critical defects through unit and integration testing using Pytest.
- Attend weekly learning sessions on the latest trends in software engineering and implement best practices, including Git version control and TDD.

Tutor / Contract Scripting

Contractor | Renton | June 2020 - Current

Tutored students in several categories helping with homework and assignments.

- Tutored an average of 5 students per week, resulting in a 90% increase in their overall grades.
- Created weekly recitations that covered complex topics in Python, algorithms, and web
  development, resulting in a 30% increase in student understanding and performance.
- Developed an API using Django that successfully transcribed, translated, and analyzed 50+ audio files per day, reducing manual processing time by 80%.
- Built a home automation system using embedded devices, resulting in a 50% decrease in energy consumption and a 20% increase in home security.
- Mentored 3 junior software developers, resulting in a 40% improvement in their programming skills and the successful completion of 3 major projects.

Front End Software Developer

State Construction | Renton | December 2019 - December 2020

Worked on construction sites doing labor and helping in the office with booking and IT development.

- Built an application with Python Flask microservices architecture that recorded user input and experiment participant responses, resulting in a 30% increase in data accuracy and a 20% decrease in response time.
- Developed custom clean markup with HTML5 and CSS3 flexbox grids, resulting in a 15% increase in user engagement.
- Created unit integration tests with Pytest, resulting in automatic checks on software system faults and code quality, which reduced the number of bugs by 25%.
- Wrote scripts to automate department efficiency, resulting in a 40% increase in productivity and a 50% reduction in errors caused by repeatable tasks.

**Vocational Student** 

Coding Dojo | Bellevue | September 2018 - December 2019

Completed assignments while assisting during code reviews and algorithm practice.

- Participated in morning scrums and bi-weekly sprints
- Converted a Desktop Application into a Web based Application using HTML5, CSS and JavaScript to implement the front-end and Java's Spring Framework to implement the backend.
- Learned HTML5, CSS, JavaScript, Python, Java and MEAN Stack
- Created CRUD (Create, Read, Update and Delete) web apps in Python (Django, Flask), Java (Spring Boot) and JavaScript (MongoDB, Express, Angular, Node)

# PROJECTS

# TITANIC SURVIVORS [LINK]

Tech Stack: Pandas, NumPv. Matplotlib, Seaborn, Scikit-learn, Machine Learning

- Machine Learning model used to predict chances of survival on the Titanic Ship.
- Implemented basic deep learning theory (Convolutional Neural Network) by feeding A.I. a training set (Feature Learning) followed by a test set(Classification).

# FINGER COUNTER [LINK]

Tech Stack: Python, JupyterLabs, OpenCV, Scikit-Learn

• Utilized OpenCV as a proof of concept, captured a moving image of the user's hand(Exposure Correction) distinguished between the fist and the fingers(Segmentation), having an active window to display the amount of fingers held up(Segmentation).

STUDY GUIDE [LINK]

Tech Stack: HTML, CSS JavaScript, Pug.js, Express.js, body-parser, cookie-parser

- App created as a study guide; Asks users randomized JavaScript guestions.
- Developed Full Stack application using mongo.db, express.js angular and node.js