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# Software Engineer | Full Stack Developer

Technology / Application Development / Software Engineer

Driven, energetic Software Developer with a passion for developing applications that improve processes and user experience. Experienced with both front end and back end work. Front end work focuses on building applications that utilize the latest frameworks to improve application interactions and garner positive user response. Back end work focuses on utilizing technology stacks to provide the largest availability and scalability to applications. Innovative thinker and quick learner.

### Areas of Expertise:

#### Technologies:

Visual Studio, Visual Studio Code Git, GitHub, GitLab Microsoft Azure, DevOps, Team Foundation, SQL Management Studio, Azure Data Studio, Office 365 Atlassian Suite SonarSource JetBrains Suite Oracle SQL Developer Vagrant, VM Box, VM Ware, Docker

### **Programming Languages:**

C, C++, C#
React, Vue, JavaScript, jQuery
.NET Core, .NET Framework
NodeJS, ExpressJS, Electron, Gatsby
PL, SQL, TSQL, NoSQL
MySQL, MongoDB, PouchDB
PHP, Drupal
Python, Flask, Jinja 2
Material Design, Bootstrap, Bulma
CSS(3), SASS, LESS

### **Core Competencies:**

System & Software Architecture
UI Design, UX Development
Database Structure & Design
Continuous Integration &
Continuous Deployment Version
Control Structure & Workflow
Agile & Scrum Methodologies REST
API Design & Implementation

## **Professional Experience**

Software Developer II | Northwest Community Credit Union - Eugene, OR (2017 - Present)

HTML(5)

Developed applications for internal business units and member facing products. Led deployment of applications into Microsoft Azure. Maintained legacy applications and databases and performed domain migrations for said applications. Promoted from Programmer Analyst in October 2019.

- Responsible for the architecture, development, and deployment of the first public facing serverless application hosted in Microsoft cloud by a credit union in the Pacific Northwest.
- Designed architecture and developed the first on-premise public facing application used by Northwest Community Credit Union Board of Directors.
- Improved business processes by creating a full stack application to reduce a three-day, two-person manual process to an under five-minute automated job.
- Developed and implemented Software Development Life Cycle to align with project management and business operations, including source code vulnerability using SonarCube, used during a successful audit.

#### NOTABLE PROJECTS:

- Open Account Online Account Opening platform to allow new members to sign up for products and services offered by Northwest Community Credit Union.
  - Worked with team to build out and design application architecture in Microsoft Azure-now a standard for future applications
  - Developed API to retrieve products and services from SQL database. Implemented endpoints for application submissions and services for application processing.
  - Lead the development and design of user interface using React, Redux, React-Router, Javascript, and other npm packages.
- eStatement Signup A serverless application to allow members to sign up for eStatements and receive \$10.
  - o Designed architecture and implemented cloud solution for serverless application in Microsoft Azure.
  - o Developed API using .Net Core and implemented interface to third party vendor.
  - Implemented encryption to meet vendor specification and to secure member information.

#### Implemented Third party micro loan product (QCash) with online banking platform (Q2) within a three-month period.

- Built C# example, based on documentation from vendor, to use as base for checking encryption of member sensitive data.
- o Researched and analyzed .Net Framework Nuget Packages to find comparable Python packages.
- Developed Python extension, within Q2 environment, to query and encrypt data from online banking platform and transmitted data to QCash application.
- Board Member Engagement Tracker Application built for the Board of Directors to track community and company
  engagements.
  - Worked with sub-committee to gather requirements, analyzed current process of engagement tracking, and provided solution for improvement over tracking engagements in Excel workbook.
  - Met with clients on daily basis to provide project updates, feature demonstrations, and end user testing for application improvement.
  - Utilized LDAP/ADP along with Microsoft Identity for user authentication and access to application operations.
- Branch Incentive Tracker Data Warehouse script SQL Script that aggregated data from core banking system and inserted data into Oracle database.
  - Created a series of custom PL/SQL Scripts for backing up database tables using the sys.ALL\_TABLES to query tables name to create and run SQL statements.
  - Responsible for expanding PL/SQL scripts, over 1200 lines longs, to aggregate additional data to meet business objects.
  - Documented change procedures rollback plan to ensure data integrity and for data recovery.
- Branch Incentive Tracker ASP.NET application to improve and automate business process for setting branch incentive goals.
  - Worked with business unit to analyze business processes to understand areas of improvement and to gather project requirements.
  - Developed .NET Framework MVC architecture for processing and setting incentive goals, including API controllers to interface with user interface for seamless data submission.
  - Developed service to integrate with Oracle database using Oracle.ManagedDataAccess.Client and Implement Autofac to map view models and database entities.

### TECHNICAL ENVIRONMENT:

C#, ASP.NET, ASP.NET Framework, .Net Core, Python, PHP, NodeJS, React, jQuery, JavaScript, SCSS/SASS, CSS, HTML, Jinja 2, PL/SQL, Powershell, TSQL, Oracle Database, Microsoft SQL Server, Cosmos Database, Visual Studio, Visual Studio Code, Atlassian Suite (Jire, Jira Software, BitBucket, Bamboo, Confluence), PyCharm, Git, GitLab, Microsoft Team Foundation, Microsoft Azure, Microsoft DevOps, IIS6, Windows Server 2019, Windows Server 2008 R2, VMWare, Workfront, SonarCube, Agile/Scrum, Kanban, Software Development Life Cycle.

Software Engineer | Technology Across the Curriculum - Oregon State University - Corvallis, OR (2015 - 2017)

Responsible for the development of web applications to support research projects. Worked with researchers and stakeholders to define project requirements and timelines. Maintained and supported Drupal environments. Introduced and maintained source control software for the department.

- Developed text analysis REST API service using a LAMP stack, Bootstrap, and jQuery along with corresponding Drupal module that consumed text analysis REST API and provided data visualization.
- Utilized Vagrant to build LAMP stack virtual machines that replicated production servers for local development, provided documentation on usage, and installed technologies.
- Analyzed XML files to construct MySQL database schema to simplify data for researchers. Developed Python scripts to
  parse and upload data. Developed administration portal using LAMP stack to review and fix inconsistency in data.
- Introduced source control software, GitHub, to department. Responsible to migrating legacy projects to Github and provided training to team members.

#### NOTABLE PROJECTS:

- **Geometry of Learning** Research project looking at the relationship between classroom geometry, proximity, and spatial behaviors and student performance.
  - Worked with researcher to gather project requirements, propose solutions for database structure for easy integration with research tools, and provided bi-weekly status reports of project.
  - o Analyzed over 10,000 XML files to understand XML structure of TurningPoint Clicker data.
  - Developed Python script for parsing XML files and uploading data into MySQL database.
  - Developed application using PHP, Linux, Apache, and MySQL to allow mismatched data to be fixed, and to manually match data of edge cases.
  - Maintained github repositories and project documentation.
- Parvus Custom built PHP Framework focusing on simplicity while retaining common features from larger PHP Frameworks.
  - Developed and implemented entities with building PHP Data Object (PDO) to perform CURD operations against database.
  - o Implemented model loading in controllers, where models are loaded based on name, and are accessible though the \$this property.
  - o Provided documentation of installation and setup, along with well documented code to maintainability.
- WordSalad Text analysis REST API for detecting the authenticity of student writing.
  - Developed REST API in PHP built on Linux and Apache for performing analysis of student writing.
  - o Developed application for administrating WorldSalad service, including functionality to index books from the Gutenberg project using Markov Chain, to update and create data corpus used by application.
  - Developed Drupal module for interfacing with WordSalad and displaying WordSalad score back to students.

#### TECHNICAL ENVIRONMENT:

PHP, Python, Drupal, MySQL, JavaScript, Bootstrap, HTML, CSS, Linux, Apache, Vagrant, JetBrains Suite (PyCharm, WebStorm, PHPStorm, DataGrip), Bash, GitHub,

Software Engineer | Valley Library - Oregon State University - Corvallis, OR (September 2016 - June 2017)

Senior Capstone project at Oregon State University. Led team of three to develop interactive navigation web application designed to help students, staff, and faculty locate books, classrooms, and other resources.

- Consulted regularly with project stakeholder on application development project status, demonstrated new features weekly, and provided documentation for project turnover.
- Designed and implemented mobile friendly user interface using Bootstrap and Handlebars.is.
- Developed administration portal, with Central Authentication Service (CAS) integration, for data entry and user management.

#### **NOTABLE PROJECTS:**

- **LibNav** Library Navigation application to help student, staff, and faculty, locate resource in the Valley Library at Oregon State University (OSU).
  - Architected project structure and develop project core using ExpressJS and NodeJS.
  - Developed integration of OSU Central Authentication Servicer (CAS) into project for user authentication.
  - o Installed, configured, and maintained Linux, Apache, MySQL, and NodeJS on Intel NUC to host and run application. Worked with OSU Kelley Engineering Center networking team to configure network access to Intel NUC and to trouble shoot other network issues.
  - Responsible for the database schema design and implementation, along with integration of CURD operation within project.
  - Responsible for code quality and review of team members. Maintained projects source control. Responsible for code merges and code confit migration resolution.
  - Worked with clients to define project requirements, converting non-technical requirements into technical specifications. Led weekly client meetings, project demos, and provided project status.

#### **TECHNICAL ENVIRONMENT:**

NodeJS, ExpressJS, HandlebarsJS, JavaScripts, CSS, HTML, SQL, MySQL, Linux, Apache, System Administration, Github

Prior professional experience as **Software Developer** with Integrated Plant Protection Center at Oregon State University. Internship experience includes **Web Developer** with Simplified Computing. Further details available upon request.

## **Education and Credentials**

Bachelor of Science in Computer Science | Oregon State University

Associate of Applied Science in Computer Programming | Lane Community College

Career Pathway Certificate in Advanced Game Development in C++ | Lane Community College

Career Pathway Certificate as a Database Specialist | Lane Community College