

Matthew Farstad

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EDUCATION

WINONA STATE UNIVERSITY

BS IN COMPUTER SCIENCE

May 2020 | Winona, MN

College of Science and Engineering

GPA: 3.4 / 4.0

COURSEWORK

UNDERGRADUATE

Practicum

Operating Systems

Machine Learning

Networking and Telecommunications

Advanced Networking

Software Engineering

Web Programming

Computer & Network Security

Principles of Programming Languages

Data Structures

Embedded Systems

Applied Database Management

Database Systems Design

Distributed Application Development

CERTIFICATIONS

AWS Fundamentals: Going Cloud Native

December 2019 | Coursera

React.js Essential Training

December 2019 | LinkedIn / Lynda

SKILLS

LANGUAGES

Java • C# • Python • Javascript

C++ • Golang • PHP • SQL

CSS • HTML • Dart

LIBRARIES / TECHNOLOGIES

Node.js • React • UWP • WPF

AJAX • Docker • MS Azure • AWS

Redux • Express • Realm • Electron

JavaFX • Redis • NATS • JSP • UWP

Hibernate • JQuery • Entity Framework

MQTT • ODBC • JDBC • Dapper

Selenium • Git • Flutter • Swashbuckle

SVN • Regex • React Native

SOFTWARE / PLATFORMS

Visual Studio • Visual Studio Code

IntelliJ • TFS • GoLand

Realm Object Server • Windows 10

JavaFX Scene Builder • OSX

Ubuntu Linux (Mint) • EC2

Windows 10 IOT Core • Raspberry Pi

UI Path • Postman • Mulesoft

4+ YEARS OF EXPERIENCE

FASTENAL | SOFTWARE DEVELOPER

Feb 2020 - Present | Winona, MN

- Lead development on second phase of Product Locator Kiosk application.
- Added new features and UI using UWP, C#, XAML, and MVVM architecture.
- Created fake customer generation software in Go + Python to streamline development of new features.
- Coordinated ODBC queries and API calls to create Product Locator Customer File Generator, load balanced with Quartz and deployed as an API via Mulesoft.

SEMIREG INDUSTRIES, LLC. | INDEPENDENT CONSULTANT

May 2019 - May 2020 | Winona, MN

- Created label printer emulation software to expand range of supported devices without spending unnecessary capital.
- IOT work involving Node.js, Docker, and Azure.
- Developed POC mobile apps with React Native.
- Created Speech-to-text solution for label printing software.
- Updated private fork of Node.js native modules with C++ and Native Abstractions for Node.js to support Electron 7.

WINONA STATE UNIVERSITY | SOFTWARE TESTER / DEVELOPER

October 2016 - May 2020 | Winona, MN

- Cross compiled Python modules written in C from x86 to MIPS Linux for use in router.
- Developed Android applications using React Native to supplement device portal.
- Developed UI unit tests for proprietary device management applications.
- Tested new releases of proprietary software and wrote detailed bug reports for the engineering team.
- Developed responsive SQL query builder front end for database for ease of use throughout company.

PERSONAL PROJECTS

JZODD | JAVA, JAVA FX, REGEX, MIDI

January 2019 - March 2019

MIDI composition software with a custom notation script written with Regex to convert strings into music.

Available for Download on Github

MFARSTAD.COM | NODE.JS, EXPRESS.JS, AWS, PYTHON

January 2019 - March 2019

Personal website that hosts my resume, a blog, links to my music, an online MIDI-based chord detection app, and a clone of the popular card game Skip-Bo. Hosted on an EC2 instance in the cloud with SSL certs maintained by me, and a Python/Node.js MQTT relay for chord detection.

Link to website.

TUCKER ZODD | COMPOSER AND PRODUCER + AUDIO ENGINEERING

Personal project with two released albums. Available on Bandcamp, Soundcloud, Spotify, Apple Music, and Youtube.

Link to releases.