MICHAEL SUN ⊓⎍

Carlstadt, NJ 07072   (314) 755-7108   linkedin.com/in/michael-sun-4978937a

sun.m710@gmail.com   sun-michael.github.io   github.com/sun-michael

WORK EXPERIENCE

Sr. Software Developer	**Lumen Technologies (CenturyLink)**	**Nov 2021 - Apr 2024**

Remote

Sr. Software Developer   June 2023 - Apr 2024

HTML, SCSS, JavaScript, TypeScript, Vue.js, AWS, Papertrail, Azure SQL Database

- o   Developed a fraud detection API for ctl.io's public-facing self-service registration, blocking 139 harmful entities and preventing potential fraud worth $3 million for Lumen in 2023. Integrated Google address verification and MaxMind data to ensure business registration accuracy and review.
- o   Streamlined the Morpheus Data web app UX by implementing a custom Groovy plugin with jQuery, ensuring standardized styles and improved dashboard navigation.
- o   Refined an AWS serverless microservice to retrieve and transfer data between services using TypeScript, Mocha for testing, and AWS SDK for secret management.

Software Developer (Apex Systems)   Nov 2021 - June 2023

HTML, CSS, JS, jQuery, Express, Axios, Gulp, AngularJS, Loopback, MySQL, GitHub, Jenkins

- o   Improved user interface with a focus on mobile-first and responsive design for ctl.io and onramp-ui.ctl.io web applications, enhancing the in-house CMS to boost customer activation process and enhance fraud detection service.
- o   Implemented an automated Microsoft Teams notification system for new signups at ctl.io, resulting in reduced response times and increased efficiency for the sales team.
- o   Improved the Vue.js and Chai test code for the Lumen Bare Metal service customer login page, reducing inconsistent login times and standardizing the UI experience.

Software Engineer Internship	**LMI Aerospace**	**Oct 2021 – Nov 2021**

St. Charles, MO

- o   Developed and launched 14 SharePoint pages for various teams within the company.
- o   Collaborated with senior developers to clean up code and enhance logging for real-time data tracking in a .NET and C# web applications.

Research Assistant	**South Dakota State University**	**Dec 2019 – Feb 2020**

Brookings, SD

- o   Specialized in deep learning for computer vision with Keras, Python, Linux, and Google Colab, enhancing the U-Net semantic segmentation model to improve detection accuracy of structural damages on bridges. Contributed to advanced research and authored a master's thesis (details in Publication section).

Teaching Assistant	**South Dakota State University**	**Jan 2018 – Jan 2019**

Brookings, SD

- o   Mentored first-year computer science students for 12 hours weekly, providing guidance in C/C++ programming and data structures during office hours.
- o   Assisted in evaluating and grading assignments for a C++ programming course.

PROJECTS

Node Web Application	**June 2024**

JavaScript, Node.js, Express, MongoDB(Atlas), Mongoose(ODM), RESTful API, Google Firebase, MapBox

- o   This personal project mimics Zillow.com's rental page, showcasing a full-stack web application. The goal is to demonstrate proficiency in front-end and back-end development through a real-world example. The application

features a RESTful API and user authentication for secure interactions. Authenticated users can view, edit, and delete rental posts just like on Zillow. The site is deployed on Render for accessibility and operational use.

o   https://primitivezillow.onrender.com

React Web Application   **June 2024**
React, React DOM, Hooks
o   Developed a React web application that allows users to search for dad jokes based on their input.
o   https://github.com/sun-michael/class-component

EDUCATION

M.S. Computer Science, South Dakota State University   **Aug 2017 – May 2020**
o   GPA: 3.6/4.0
o   Acquired a robust foundation in computer science with a focus on web development and machine learning, culminating in the publication of a deep learning thesis in the APICIST journal (see publication section below).

Military Service - The Board of Audit and Inspection of Korea   **Sept 2014 – Nov 2016**
o   Completed national service obligations in South Korea by serving in the Audit department, similar to the U.S. GAO, with a focus on upholding integrity and accountability in government processes and documentation.

B.S. Architectural Studies & Interior Design, University of Missouri   **Aug 2010 – May 2014**
o   GPA: 3.5/4.0

SKILLS

Languages   HTML, CSS, SASS, JavaScript, C, C++, JQuery, TypeScript
Others   Node.js, Express, React, Bootstrap, Mongoose, Jasmine, AWS (Lambda, CloudWatch, CodePipeline, Secrets Manager, DynamoDB), MERN stack, MySQL, MongoDB

PUBLICATION

The 15th Asia Pacific International Conference on Information Science and Technology.   **July 2020**
o   "Sun, M., Won, K. (2020). Concrete Crack Detection Using A Modified U-Net Architecture. APIC-IST 2020."