

# Pranesh Shrestha

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Aspiring Software Engineer with more than 2 years of professional experience for building solution-focused scalable web applications. Demonstrates strong analytical and problem-solving skills and solid understanding of software engineering principles.

## PROFESSIONAL EXPERIENCE

### Software Engineer - II, I

AUGUST 2021 - PRESENT

Microchip Technology, San Jose, CA

developed a cross-platform Power Estimating application for FPGA with React, C++, Electron and Python.

- Researched and prototyped on libraries and toolchains for building cross-platform applications.
- Formalized Initial System Architecture design for higher level use-cases, data structure, and data flow.
- Built a internal DataGrid in React which renders dense data tables with advanced features like inline editing, selection list, sorting, filtering, validation, clipboard etc.
- Implemented Data Visualization charts with d3 for representing user data for improved story telling.
- Built feature rich UI Design System based on design specification in figma with accessibility support.
- Created a customized Tabbed View to facilitate easier navigation between the pages and support for split panels.
- Implemented JSON based RPC message transmission between UI and Engine for data synchronization.
- Ported C++ codebase and its dependencies to be compatible with C++17.
- Utilized Emscriten and its toolchain to compile c++ codebase to wasm modules for web.
- Created a flow to use automated tools for profiling memory, speed and resource usage.
- Built an automated pipeline for building, linting, testing and packaging in Jenkins.

## PROJECTS

### Portfolio Website

A Server Rendered portfolio website built with React, TailwindCSS and NextJS. It is deployed in Vercel.

## TECHNICAL SKILLS

Data Structures, Algorithms, Object Oriented Programming, Software Design, Scrum, Automata, WebAssembly, CLang  
State Machine, TCP/UDP Communication, Machine Learning, Image Processing, Data Modeling

## LANGUAGES & TOOLCHAIN

TypeScript, Python, C/C++, Java, HTML, CSS, Rust, MySQL, MongoDB, Redis, SQLite, NextJs, GCloud, Webpack, Esbuild,  
CMake, Bazel, Jenkins, Jest, Google Test, Playwright

## EDUCATION

Texas Tech University Lubbock, TX

AUGUST 2017 - MAY 2021

Bachelor's of Science in Computer Engineering w/ Minor in Mathematics

GPA: 3.69/4.0