

T. M. Prevo

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Skills

Back End: Python, Google Cloud Platform (GCP), generative AI (APIs, LangChain), R

Front End: Next.js (React), Streamlit, JavaScript, TypeScript

Tools: Jira, Git, Notion, Tableau, MATLAB, 3D CAD (Solidworks, Pro Creo, NX, Windchill)

Logic: Differential Equations, Linear Algebra, Statistics, Research & Development, Experiments (A/B, multivariate)

Experience

Freelance Engineer – Remote in Hood River, OR

May 2024 — Present

- Project Manager, FHA 203k Renovation, completed 2 months early and over \$16,000 under budget
- Design and deploy websites, containerized applications, and services to various platforms such as Docker, Kubernetes, GCP, AWS for high-availability and easy management
- Operating system replacement & configuration (Ubuntu/Linux/Unix, Windows, iOS, Android)

Embedded Software Engineer II, Daimler – Remote in Portland, OR

Feb 2021 – May 2024

- Led software development initiatives across 4 global teams, 130 microcontrollers, and 11 networks, establishing robust documentation processes and technical requirements while coordinating between internal and external stakeholders with competing priorities
- Navigated and extracted critical data from multiple enterprise database systems (including Git, legacy COBOL, IBM DB2, and proprietary databases), reducing daily Custom Work Orders by 80% using data-driven fixes
- Created comprehensive technical reports by synthesizing data from multiple sources using visualization tools (SQL, Tableau, Power BI) to drive decision-making across engineering teams
- Developed automated test scripts in CAPL (Communication Access Programming Language) and performed network trace analysis to validate vehicle software variables and support the Product Validation Engineering Team

Engineering Intern, IRPI & NASA Ames – Remote in Portland, OR

Jun 2020 – Sept 2020

- Identify and report bugs in beta computational fluid modeling software by comparing outputs to numerical calculations of equilibrium fluid interfaces
- In-depth quantitative study of the Navier-Stokes equations & their approximation using scaling analysis

Engineering Intern, Daimler – Portland, OR

Jun 2019 – Aug 2019

- Developed software in VBA, SQL, and Python for specific business use-cases which alleviated workload by 38 engineering hours per month in the Third Party Powertrain division (Engine & Transmission ECU programming)

Propulsion Engineering Intern, NASA – Huntsville, AL

Jun 2016 – Aug 2016

- Cleaned and regressed complex magnetic vibrational dataset containing over 280 million multi-parameter measurements in MATLAB and WinPlot, validating theoretical models

Education

Maseeh College of Engr. & C.S. – BS Mechanical Engineering, Latin Honors [3.88]

June 2020

Genesee High School – Diploma with Honors [3.92]

June 2008

Select Awards

1st Place in Engineering Division at NASA Intern Symposium (now Patent #11,098,817), 2016. Bravo! Awards at Daimler (ADAS Team Management 2024, Product Validation Engineering 2023, Direct Manager 2023). NASA UTEAP Grant 2014, 2020. Daimler Mechatronics Scholar, 2018. Maseeh President's List, 2017 – 2020. Certificates of Academic Excellence from PCC College President and Board, 2014, 2015, 2016. "Top 10" Students, 2008. Excellence in Biology, 2008. Excellence in Directing, 2008. Certificate of Scholarship (High Achievement), 2004. Founder & CEO of "Haas Elementary Coat Drive," which has continued to keep Michigander children warm during recess since 1997.