SAAHIL
VASHISHTA

(765) 476-3547 /in/saahil-vashishta-b50971a4
saahil.vashishta1@gmail.com

SKILLS

Software | Maple, Python, Java, C, MATLAB, LabVIEW, Visual Basic, SAP, AS400, Doors NG, Windchill
Design | SolidWorks, CATIA, AutoCAD, Abaqus, Autodesk Fusion 360, MeshLab, Finite Element Analysis
Qualitative | Configuration & Change management, SCRUM leader, Project leadership
Certification | Automotive Functional Safety & ISO 26262 Certified, Java Basic and Java Intermediate certified (Codecademy), C++ certified (Codecademy)

PROFESSIONAL WORK EXPERIENCE

TRIMBLE| Lead Functional Safety Engineer — **Remote, WA | DEC 2021-PRESENT**

- Leading Functional Safety documentation, implementation and testing on off-road applications for Trimble Autonomous Solutions
- Leading the test team to perform Functional Safety Testing and Safe product Testing.
- Interacting with suppliers to deliver technologies in compliance with ISO 25119, ISO 26262 and ISO 19014
- Leading Hardware and Software validation for Functional Safety and authoring test processes.

PACCAR | Vehicle Integration & Functional Safety Engineer — **Kirkland, WA | FEB 2020-DEC 2021**

- Authored Software Requirements that fed into test teams and software implementation for vehicle level functions.
- Developed Item Definition, Hazard Analysis and Risk Assessment, Functional Safety Concept and Software requirements for BEV (Battery Electric Vehicles) functions as Functional Safety Lead for PACCAR Global (Kenworth, Peterbilt, DAF and Leyland Motors).
- Developed Item Definition, Hazard Analysis and Risk Assessment, Functional Safety Concept and software requirements for Parking functions as Functional Safety Lead for PACCAR NA (Kenworth & Peterbilt).
- Led development for Engine Idle Technology as a Function owner and worked with Greenhouse gas functions in compliance with electronic code of federal regulations and EPA.
- Responsible for Technical Debt Estimation and support in Change management for automotive functions.
- Interacted with automotive suppliers to develop technologies in compliance with ISO 26262.

Wabash National Corporation | Design Engineer — **Lafayette, IN | JAN 2019 - FEB 2020**

- Handled commercial orders for dry freight bodies, created and supplied bill of materials for high volume orders and designed/approved all components for each truck body.
- Approved prints for production, working with production and purchasing to streamline manufacturing.
- Created engineering change notices and revisions on SAP to facilitate design changes.
- Visited production facilities to gauge scope for improvement and conducted design reviews.
- Headed new projects and developed design standards and work instructions to aid other engineers.
- Coordinated with internal sales representatives and vendors to facilitate production.

Sentient Science | Junior Design Engineer — **West Lafayette, IN | OCT 2017-DEC 2018**

- Programmed matrices and material wear prediction software on MapleSim.
- Designed control systems for simulation and created stiffness matrices for wind turbine gearbox housing using Abaqus and MapleSim and ran simulations to detect and compare axial and radial forces graphically for gearbox bearings.
- Authored Python scripts to automate data analysis.
- 3D Scanned and reverse engineered wind turbine Gearboxes while designing and modeling shafts, gears, bearings and casing with assembly for further analysis using CAD and 3D imaging software and scanner.
- Conducted finite element and structural analysis on Gearbox components and wind turbine housing on Abaqus. Exported meshes to run simulations and design control systems.

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INTERNSHIP EXPERIENCE

Subaru of Indiana Automotive | Energy Compliance Intern — **Lafayette, IN | AUG-DEC 2016**

- Developed an energy saving module to optimize processes and reduce peak demand resulting in reduced expenditure on energy.

Siemens Inc. | Internship Rotation — **Summer 2014 | Summer 2015 | Summer 2016**

- 3 term internships with Siemens in the healthcare and energy division in Gurugram, Mishawaka and Orlando.
- Designed steam turbine bearing equipment to improve fire protection standards using CAD software.
- Filed an invention disclosure and patent application under Siemens for a steam turbine bearing accessory.

PROJECTS

Senior Design Project Smart Kart — **Spring 2017**

- Created and designed an autonomous shopping cart that follows a unique user pattern with the help of camera, ultrasonic sensors, and driven by a micro-controller.
- Achieved smooth control using an Arduino and collision detection using Ultrasonic sensors.

Nanotechnology Property Simulation (In partnership with Nanohub) — **Fall 2013**

- Developed a graphical user interface on MATLAB that helps in understanding the properties of nanotechnology and its applications.

EDUCATION

B.S MECHANICAL ENGINEERING | PURDUE UNIVERSITY, MAY 2017

M.S SOFTWARE DEVELOPMENT | BOSTON UNIVERSITY, DEC 2023