


# Logan Stack

Software engineer with B.S. in computer science and 3 years' experience at a top company in the automotive industry. Developed algorithms for camera quality control in autonomous vehicles and co-authored the pipeline for embedded vehicle software. Seeking to leverage proven expertise for a new and challenging software engineering role.

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## Work Experience

### Software Engineer II – General Motors (Autonomous Vehicles)

Detroit, MI • 2022 - Present

- Built a web application using React, Flask, and Electron to host in-house image quality control software
- Developed 6 unique tools for the evaluation of image quality properties such as color and clarity
- Increased runtime efficiency of a patent-pending modulation transfer function (MTF) algorithm by 55%
- Designed a color filter array in Python in contribution to an intrinsic camera calibration software
- Supervised three junior software engineers in GM's rotational program

### Dev Ops Engineer – General Motors (Vehicle Motion and Embedded Controls)

Detroit, MI • 2019 - 2022

- Co-authored a Jenkins-based continuous integration & continuous development pipeline, written in Groovy, that is responsible for regularly building, testing, and logging 65 software components
- Wrote a script in Python that detects build errors and reports them directly to the offending author
- Utilized Python and Git repository history to automate the generation of release letter content for Electronic Control Units, serving as official business records with 10 new records being generated daily
- Devised an algorithm for the automated archival of ILM compliant material

### Software Engineer Intern – Michelin

Greenville, SC • 2018 - 2018

- Authored a repository migration application to automatically transfer data from Subversion to Git using the Grails framework
- Created a blockchain to track resource allocation and value analysis in End User Experience using Multichain, MongoDB, Express.js, Angular 6, and Node.js

## Education

### B.S. in Computer Science – The Pennsylvania State University

University Park, PA • 2015 - 2019

## Technical Skills

**Languages** - Python, Java, Groovy, C++, C, Javascript, Bash, MySQL, HTML, CSS, Lua, Perl

**Tools & Frameworks** - Flask, Spring, React, Node.js, Electron, Bootstrap, Git, Github, Gerrit, Jira, Jenkins, Docker, Kubernetes, Artifactory, Rational Team Concert

**Certifications** - SAFe 5.1, Design for Six Sigma (DFSS)

## Projects

**picture\_book** Python

- A program that uses DeepAI generated images to add illustrations to books by using topic modeling to determine the central theme of each page

**Google Trends game** Javascript, Express.js, React, HTML, CSS, Bootstrap

- An online game developed with the Google Trends API to guess categorical search term popularity