

James Shockley

Software & Data Engineer

SUMMARY

Creative, detail-oriented, software engineer with a deep respect for the value of data. Proven track record of managing, supporting, and developing data and systems architectures for over \$1 billion combined investment in manufacturing ramp-ups.

WORK EXPERIENCE

Software & Data Engineer (Connectivity Architect) at BOSCH, Anderson SC

Python, Flask, Azure, Databricks, Kafka, SQL & SQLAlchemy

November 2019 — Present

- Designed the data & system architecture for the \$600 million investment in North American Hydrogen Fuel Cell production in Anderson, SC
- Designed, developed & maintained event-driven data pipelines to enable AI-powered self-adjusting machines, optimizing to the current production environment
- Developed, automated, and maintained the AI model training & release pipeline for Automated Optical Inspection processes using Python & associated ML libraries
- Democratized data availability to drive insights for engineering & operations by parsing and consolidating unstructured data into an on-prem data warehouse, and replicated to an interplant-network data warehouse on Azure with Kafka and Azure Databricks
- Developed and maintained full-stack web applications and REST API's for data collection via manual or bespoke processes with Python, Flask, and SQL Alchemy
- Evaluated tools and led the adoption of the enterprise data catalog & metadata store for BOSCH Anderson, empowering users ability to speak with, and understand, their data

Full-Stack Software Engineer, Freelance, Greenville SC

HTML, CSS, JavaScript, React

January 2022 — Present

- Worked in tandem with clients to develop web sites from start to finish that embody their brand and enhance their business
- Managed multiple projects and deadlines while maintaining client contact, weekly updates, and maintenance

IT Enterprise Architect, Mercedes-Benz, Charleston SC

SQL, Java

Apr 2017 — Oct 2019

- Supported the system & data architecture landscape for the \$500 million ramp-up to part-by-part sprinter production for North America, ensuring system & pipeline changes met both business needs and established IT governance best practice
- Supported the rollout of the new Daimler manufacturing execution system, succeeding a 30-year-old standard monolith, in the Charleston body shop.

Recent Projects: **MovieSquad.net** | React, Node.js, Express.js, MongoDB

Facilitating film conventions, watch parties, and movie nights at any scale. MovieSquad allows users to create & share watchlists across platforms and streaming services.

CONTACT

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SKILLS

HTML

CSS

JavaScript

React

Node.js

Python

Pandas & Spark

Flask

SQL + ORM

MongoDB

PostgreSQL

SQL Server

Oracle

Kafka

EDUCATION

College of Charleston

2012 - 2016

Major: Computer Science

VOLUNTEER

CodeForGreenville.org

2022 - (current)

Individual contributor