Jake Groszewski

San Antonio, TX

LinkedIn

Experienced manufacturing engineer that has transitioned into software development.

Professional experience

Research Computer Scientist — Southwest Research Institute

August 2022 – Present

Developed transportation management applications using C#, Python, Java, and C++

Built and optimized cloud-native services on AWS for scalability and reliability

Used AWS Cost Calculator to estimate service usage and optimize costs

Designed and implemented external APIs enabling clients to securely extract system data

Manufacturing Engineering Specialist — L3Harris Technologies

May 2020 – June 2022

Decreased cycle time by 37% through programming and development of a new robotic soldering station

Developed Raspberry Pi Python GUI application for employee badge scans and ESD compliance

Data mining of supplier quality and estimating data for cross-functional teams

Managed capital equipment projects (e.g. bridge crane systems) from concept to implementation

Manufacturing Engineering Senior Associate — L3Harris Technologies

April 2018 – May 2020

Quality data entry forms and databases via Excel VBA and Access for traceability and analysis

Excel VBA add-ins to automate and error-proof data analysis

Automated test report generation from database queries into MS Word (~1 hour/document savings)

Engineering change requests/orders, floor layout redesigns, SOPs, training, 5S and safety champion roles

Manufacturing Engineering Technician — Harris Corporation

July 2017 – April 2018

Automation and standardization with Excel VBA add-ins and label printing SDK integration

Defective material returns processing; root cause analysis and corrective actions

Manufacturing Process Engineer — Hypertherm Inc.

April 2012 – July 2016

Robotic automated cell with quality plan for automatic inspection (~200% output increase)

Real-time pulse point TV monitors via Excel VBA

Quality data collection, process capability studies, scrap reduction (2.5% to under 1.5%)

Assembly press scrap reduction (~90%), GR&R and tool life studies

Education

Master of Science, Computer Science — Rochester Institute of Technology

January 2018 – May 2021 · GPA: 3.82/4.0 · Cluster: Intelligent Systems

Dashboard camera accident prediction: LSTM model on SLAM and bounding box features

IoT / GPS / anomaly detection: GPS to KML, noise reduction, ML classification of routes, DBSCAN clustering

Capstone — speech synchrony: CNN + LSTM on Mel spectrograms for emotion recognition and speaker synchrony

Bachelor of Science, Mechanical Engineering Technology — Rochester Institute of Technology

2007 – 2012

Skills

Python, data analysis, VBA, databases, manufacturing systems, project leadership, continuous improvement.