laka Craszawski		
Jake Groszewski	jgroszewski9@yahoo.com	Mobile: (585) 690-9482

Rochester, NY 14626

https://www.jakegroszewski.com/

https://www.linkedin.com/in/jakegroszewski/

Experienced manufacturing engineer with a strong desire to transition into the software development world. Exhibits a robust background in problem-solving, troubleshooting, project management and cross functional team collaboration to drive continuous improvements. Along the manufacturing engineering career path, several programming related projects were encountered, further enhancing the hunger for a software development role. This ultimately culminated with the completion of a master's degree in computer science, which provided a formalized learning experience in an academic environment from an accredited institution.

PROFESSIONAL EXPERIENCE

• Manufacturing Engineering Specialist | L3Harris Technologies | 05/20 – Present

- o Decreased cycle time by 37% through the programming and development of a new robotic soldering station
- o Developed Raspberry Pi Python GUI application to record employee badge scans and meet electrostatic discharge compliance regulations
- Data mine supplier quality and estimating data, extracting meaningful analysis to provide to respective teams
- o Manage new capital expense equipment projects, such as bridge crane systems, from concept to implementation

• Manufacturing Engineering Senior Associate | L3Harris Technologies | 04/18 - 05/20

- o Development of quality data entry forms and databases via Excel VBA and Access for historical traceability and performing data analysis techniques
- Programming various Excel VBA add-ins to automate and error proof data analysis tasks
- Automate the creation of test report data documents through the querying of a database and subsequent inputting of results to a MS Word document, resulting in both a 1 hour/document time savings and the elimination of manual data entry errors
- o Collaborate with design and systems engineering teams, providing improvements via Engineering Change Requests/Engineering Change Orders (ECR's/ECO's)
- o Redesign floor layout to accommodate new product requirements in an ever-changing program-based manufacturing environment
- $\circ~$ Creation and maintenance of standard operating procedures, process documentation and label printing files
- Daily support of production lines, including conducting preventative maintenance tasks and facilitating employee training certification
- \circ $\,$ Management of budgets used for the procurement of manufacturing support items
- o Continuous improvement project leader, 5S and Safety Champion

• Manufacturing Engineering Technician | Harris Corporation | 07/17 – 04/18

- Creation of methods and procedures to improve quality control of manufacturing processes with automation and standardization via Excel VBA add-ins and label printing SDK integration, saving 2+ hours/week and eliminating manual data entry errors
- o Expedite the disposition and processing of defective material returns (100+ instances/annually) to meet program ship date requirements
- o Utilize root cause problem solving techniques to implement corrective actions for quality issues, such as eliminating intermittent cable connection failures

• Manufacturing Process Engineer | Hypertherm Inc | 04/12 - 07/16

- o Implementation of a robotic automated cell, focused on the development of a quality plan for automatic inspection, increasing output by ~200%
- o Creation of real-time updating pulse point TV monitors to display status of machining and assembly area output through Excel VBA
- Collaboration with laser marking vendor to improve front end software programming to eliminate quality issues
- Creation and maintenance of quality data collection, and analysis of process capability studies, which resulted in a decrease of scrap from 2.5% to under 1.5%
- $\circ~$ Led assembly press operation scrap reduction project resulting in a ~90% reduction of non-conformance's
- Conducted GR&R and tool life studies, saving \$0.001/unit (~\$50k annually)
- o Maintenance of all routings and BOM's, procedure documents and facilitating employee training certification

EDUCATION

• Master of Science in Computer Science | Rochester Institute of Technology | 01/18 - 05/21

- GPA: 3.82/4.0
- o Cluster/Focus: Intelligent Systems
- o Dashboard Camera Accident Prediction Project [Computer Vision]
- Developed an LSTM recurrent neural network deep learning model, which was trained on SLAM and bounding box features, to predict accidents
- o IoT using GPS, Data Visualization, and Anomaly Detection Project [Big Data Analytics]
 - Process and clean raw GPS data into KML format for Google Earth visualizations, using techniques such as noise reduction and anomaly detection
 - Performed machine learning classification on routes to mark locations where a vehicle stops, as well as taking left and right turns
 - Agglomerated marking location data across all routes using DBSCAN clustering algorithm
- Exploring Synchrony Using Prosody Signals [Capstone Project]
 - Trained a CNN + LSTM model using Mel spectrogram data for speech emotion recognition, to calculate the level of synchrony between speakers

Bachelor of Science in Mechanical Engineering | Clarkson University | 08/07 - 05/11

- o GPA: 3.46/4.0
- Dean's List: Fall/Spring 2007-2011
- Minor: Mathematics

<u>SKILLS</u>

• Programming Languages/Technologies:

 Python [Pandas, Numpy, Matplotlib, Sklearn, PyTorch, TensorFlow, Librosa], Java, Excel VBA, Django, R/R-Studio, SQL, MySQL Workbench, Pentaho/Kettle, JavaScript, HTML/CSS, Raspberry Pi, Windows/Linux OS

• Computer Software:

o SolidWorks, AutoCAD, SharePoint, Microsoft Excel/Word/PowerPoint/Visio/Access, Minitab, Oracle EBS/EiS, Oracle Agile PLM

• Professional Development:

 Project Management [WPI], Laser Marking [Rofin], Metal Cutting Applications Training [Kennametal], GD&T [Applied Geometrics, Inc.], Green Belt Certification [Hypertherm], Excel VBA [Accelebrate]