Jason Castillo

www.linkedin.com/in/jason-castillo-180702139

704 Shade Tree Dr.
Austin TX• 78748
TEL: 512-466-2741
E: jzcastillo1987@gmail.com

EDUCATION

Master of Software Engineering — **Spring 2024**
University of Texas, Austin
Coursework: Mobile Computing, Programming Paradigms, Systems Programming, Scalable Machine Learning, Machine Programming NLP, Bitcoin, Distributed Systems, Networks and Communications, Algorithmic Foundations, Parallel Algorithms, Software Testing

Bachelor of Science in Electrical Engineering with an Emphasis in Micro and Nano Devices — **Fall 2017**
Texas State University
Minors: Applied Mathematics and Physics
Coursework: Engineering Electromagnetics, Digital Systems Analysis & Design, Digital Logic, Microelectronic Mechanical Systems, Signals and Systems, Fundamentals of CS

Projects

- Qualified a RF match for a for dry etch tool by installing the hardware and running process qualification that yielded 20% increase in efficiency
- Designed analog and mixed signal circuits, like PLL and other filters. Utilized NI Mutism to run simulations and then implement with real hardware components on a breadboard and testing with Oscilloscope with FFT, DMM and signal generators
- Developed a ML model to automatically classify defects from defect images using python
- Designed a microcontroller on Xilinx using Verlog HDL
- Developed a pH meter using a Raspberry Pi and pH probe for my undergrad senior design project. Used python scripting to make a live time sensor with the capability to calibrate the probe
- Built a simple website to get full stack experience where I got to experience CSS, HTML, Javascript, node.js, MangoDB, SQL

WORK EXPERIENCE

Equipment/ Process Manufacturing Engineering

Company: NXP	Areas: Photo and Cleans	Mar 2018 – Jun 2023

- Elevated tool availability from 70% to 93% in just 8 months as an Equipment Tool Owner. Implemented a strategic approach emphasizing standardization through comprehensive documentation and training. Conducted root cause analyses using Six Sigma techniques.
- Served as a key advocate for the implementation of Fabguard smart Fault Detection and Classification in the photo and cleans process
- Conducted thorough qualifications for new TEL tool installations. Collaborated efficiently with equipment engineers and vendors, ensuring swift resolution of encountered issues and streamlining the integration process.
- Successfully converted all 365nm i-Line processes from an ACT 8 track to a Pro-Z Lithius. Achieved product test readiness for all recipes within the established schedule
- Process owner of polyimide layer and brought the tool to 100% utilization and prevented line down events.
- Proactively prevented mass excursions by applying last-minute risk assessments and maintaining vigilance around the clock.
- Utilized a DMAIC (Define, Measure, Analyze, Improve, Control) approach to identify solutions for a chronic issue on a newly acquired toolset. The implemented solution reduced maintenance interventions and prevented scrap across the entire fleet

PK Lab Coordinator

Company: PPD (Pharmaceutical Product Development)	Areas: Pharmacokinetics Laboratory	Aug 2005 - Mar 2018

- Supervisor of a pharmacokinetics laboratory