Kaylin Punotai

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EDUCATION

UNIVERSITY OF COLORADO BOULDER June 2021
Master of Science in Electrical Engineering Boulder, CO
GPA: 3.655

CORNELL UNIVERSITY May 2019
Bachelor of Science in Chemical Engineering Ithaca, NY
GPA: 3.301

SKILLS

Programming: C# ◆ CSS ◆ HTML ◆ JavaScript ◆ Python ◆ React ◆ VBScript ◆ Windows Batch Scripting
Hardware: Verilog ◆ VHDL
Data Analysis: JMP/JSL ◆ Matlab ◆ SQLPathfinder ◆ Wolfram Mathematica
Design: AutoCAD (2D) ◆ SketchUp (3D)

EXPERIENCE

INTEL CORPORATION July 2019 – Present
Wafer Sort Process Engineer Aloha, OR

- Conceptualized, designed, and released a new and essential WPF GUI in C# that performs common tool server procedures and remote operations on up to 8 associated tester CPUs. Yielded significant labor and time savings for engineers and technicians, who use the GUI daily on tool controller servers. Seeking development ideas from all users on a frequent basis to continuously add new features and refine GUI.
- Developing Python scripts and SQLPathfinder queries to distill copious tool logs and wafer sort data into health indicators and equipment summaries. Sending scheduled reports as emails and HTML pages for modules to monitor equipment performance. Leading weekly tool alarm meetings using reports to identify error root causes, develop responses, and increase availability.
- Identified inefficiencies in manual tester tracking methods and established a semi-automated solution that consolidates tester properties, such as board configurations and tester locations on the cleanroom floor, and updates current info on an hourly schedule. Created a Python script for users to input properties that cannot be automated, such as calibration settings. Saving 3 hours of manufacturing time per week by reducing time to physically locate and move a required tester.

PROJECTS

GITHUB PORTFOLIO Present
Personal Project

- KaylinPunotai.github.io: Built a React website of my resume from scratch.
- Queens Puzzle: Recreated the “Eight Queens Puzzle” as a React app that uses an algorithm to ensure only one queen can occupy a single row, column, and diagonal on the chessboard.

SENSOR READING GUI WITH AWS CONNECTION March 2021
Class Project

- Designed 2 GUI’s (PyQt and HTML) that allows users to retrieve temperature and humidity sensor readings. Wrote Python script that retrieves readings, stores data and timestamps in MariaDB, calculates reading statistics, converts all temperatures to Celsius or Fahrenheit, and alerts when readings exceed user-defined alarm values with a visual indicator. Utilized Tornado websocket server to establish communication between Python and HTML GUI.
- Implemented an AWS connection to store readings to DynamoDB on the cloud. Created an SQS subscription to new readings that invokes a Lambda rule to create entries in the database from incoming messages. Linked the HTML GUI client to send RESTful GET requests to the API Gateway, which triggers another Lambda to scan the database and return entries to the client.