

# Kaylin Punotai

[kaylin.punotai@gmail.com](mailto:kaylin.punotai@gmail.com) | (815) 572-1338 | [kaylinpunotai.github.io](https://github.com/kaylinpunotai)

## SKILLS

---

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

## EXPERIENCE

---

### JADE MECHANICAL SERVICES, LLC

*Vice President*

April 2022 – Present

*Elk Grove Village, IL*

- ♦ 49% owner responsible for day-to-day operations, sales, contract negotiations, field MEP coordination, and project management.

### INTEL CORPORATION

*Wafer Sort Process Engineer*

July 2019 – March 2022

*Aloha, OR*

- ♦ Developed Python scripts and SQL queries to distill copious tool logs and wafer sort data into health indicators and equipment summaries. Sent scheduled reports as emails and HTML pages for modules to monitor equipment performance. Lead 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. Saved 3 hours of manufacturing time per week by reducing time to physically locate and move a required tester.
- ♦ Conceptualized, designed, and released an 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. Sought development ideas from all users on a frequent basis to continuously add new features and refine GUI.

## PROJECTS

---

### HEART DISEASE CLASSIFICATION

February 2023

*Personal Project*

- ♦ Practiced classifying heart disease data to predict onset of disease and compared performance for logistic regression, SVM, decision tree, random forest, XG Boost, and naive Bayesian models.

### SHOPIFY APP

August 2022

*Personal Project*

- ♦ Designed and developed an application for a private merchant to simplify their Shopify storefront construction experience.
- ♦ Migrated a PostgreSQL database that stores the merchant's fabric inventory with attributes such as material, color, and image. Created an add-on block for the merchant's product listing that renders a select menu with fabric options and their images. Employed Ruby on Rails to send REST requests to the database, operable to the merchant via Javascript forms and table displays.

### 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.

## EDUCATION

---

### UNIVERSITY OF COLORADO BOULDER

*Master of Science in Electrical Engineering*

**GPA:** 3.655

June 2021

*Boulder, CO*

### CORNELL UNIVERSITY

*Bachelor of Science in Chemical Engineering*

**GPA:** 3.301

May 2019

*Ithaca, NY*