

# DAVID HUANG

## EDUCATION

### Western Governors University

Bachelor of Science – Computer Science – December 2023

Certifications – CompTIA Project+, ITIL 4

## SKILLS & TOOLS

**Languages** – Python, Java, C++, SQL, FXML, AIML, HTML, CSS, JavaScript, ExtendScript

**Database** – MySQL, PostgreSQL

**Tools** – MySQL Workbench, pgAdmin, PyTorch, Scene Builder, Google Colab, RepairQ

## PROJECTS

### Image Classifier (Python)

- Developed a Python web app using the PyTorch machine learning framework that trains a convolutional neural network (CNN) to identify images
- Utilized torchvision to transform images in the CIFAR-10 dataset for training the EfficientNet-B0 CNN
- Used Matplotlib, NumPy, and TorchMetrics to produce learning curves, confusion matrix, and image results

### Scheduling Application (Java, FXML, SQL)

- Developed a Java application using JavaFX that manages appointments, customers, and generates reports
- Pulled data from a MySQL database using the Java Database Connectivity API
- Used Scene Builder to create a friendly user interface that adjusts data based on the user's location

### Postal Routing Application (Python)

- Developed a Python program that simulates efficient timely delivery of mail packages with package tracking
- Wrote a nearest neighbor algorithm function as a heuristic to generate routes for mail trucks
- Implemented a hash table from scratch to learn about dictionaries and hash functions

See Additional Projects at [davidhuang.dev](https://davidhuang.dev)

## EXPERIENCE

### CPR Cell Phone Repair Mt Juliet (2017-2022) – General Manager/Owner

- Managed all store operations such as opening and closing, scheduling shifts, and ordering inventory
- Created a positive work environment for technicians to efficiently handle repair workload
- Maintained a 4.8 Google Maps rating with over 500 reviews by providing excellent customer service
- Negotiated B2B sales with Smith County Board of Education for Chromebook computer repairs
- Hired and trained technicians in all repairs and store responsibilities
- WISE Level 2 certified technician – repaired thousands of smartphones, tablets, computers, and drones
- Performed through-hole and surface mount micro soldering

### Meharry Medical College Office of Institutional Research (2016-2017) – Intern

- Utilized Winsteps software to run Rasch analysis on student survey questionnaires
- Learned how to use R statistical package and Facets to run different statistical analyses
- Assisted professor in proofreading research papers regarding the Rasch model

### GuruSkins (2015-2016) – Technology Consultant

- Built a computer server linked to Box cloud storage for processing images in Photoshop
- Used Adobe ExtendScript to develop scripts for automating Photoshop actions
- Organized and managed network file structures for data storage and access
- Negotiated a contract with a third party for software development

### Vanderbilt University Institute for Software Integrated Systems (2014) – Intern

- Modeled and evaluated cyber physical systems for the development of Google ARA modules
- Practiced strict time management to complete a major project and prepare a presentation for Google and city officials in a short timeframe
- Learned Python to pull data from digital and analog sensors using an Arduino and Raspberry Pi