

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
- Utilized 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

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 run various statistical analyses on platforms such as R statistical package and Facets
- Helped professor write and critique research papers regarding the Rasch model

GuruSkins (2015-2016) – Technology Consultant

- Built a computer server linked to Box cloud storage for Adobe Photoshop image processing
- Negotiated a contract with a third party for software development
- Developed Adobe ExtendScript scripts to use Photoshop actions for automation
- Organized and managed network file structures for data storage and access

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