

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, PyCharm, IDEA, Visual Studio, PyTorch, Scene Builder, 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
- Performed CRUD operations on a MySQL database with the Java Database Connectivity API
- Used Scene Builder to create a user-friendly interface that displays data dependent on the user's location

Postal Routing Application – Python

- Developed a Python program that simulates on-time delivery of mail packages with tracking features
- Implemented the nearest neighbor algorithm to heuristically generate efficient routes for mail trucks
- Created a hash map from scratch to learn about dictionaries and hash functions

See Additional Projects at davidhuang.dev

EXPERIENCE

General Manager/Owner

CPR Cell Phone Repair Mt Juliet

Nov 2017 – Nov 2022

- Managed all store operations such as opening and closing, scheduling shifts, and ordering inventory
- Created a positive work environment for technicians to effectively 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

Research Intern

Office of Institutional Research, Meharry Medical College

May 2016 – May 2017

- Utilized Winsteps and Facets to run Rasch analysis on student survey questionnaires
- Learned the R language to perform statistical analysis and measurement
- Assisted in editing and proofreading a Rasch model research paper for publication

Technology Consultant

GuruSkins

Aug 2015 – May 2016

- Built a Windows server synced with Box cloud storage to manage digital assets
- Wrote Adobe ExtendScript scripts to automate image processing in Photoshop for vinyl printing
- Planned and implemented file structures for efficient data storage and retrieval
- Negotiated a contract with a third party for development of a Java application

Intern

Institute for Software Integrated Systems, Vanderbilt University

May 2014 – Aug 2014

- Modeled and evaluated cyber physical systems for development of Google Project ARA phone modules
- Learned Python to read data from digital and analog sensors using an Arduino and Raspberry Pi
- Exercised Kanban time management to complete a large project and prepare a presentation for Google and city officials in a two-month timeframe