Wendy Zhang

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Skills

Languages: Python, C, C++, Bash, HTML
OS and Tools: Linux, Git

Experience

Software Engineer - Aupera Technologies, Computer Vision **05/2021 – 08/2021**

- Wrote a script that calculates average accuracy and error per minute of head and body detector by comparing hours of detection output with ground-truth output, using Python, NumPy and Pandas
- Wrote a script in Python and OpenCV that processes labelled traffic images to fit input requirements of plate detector
- Ran head and body detector on videos in Linux to generate detections for accuracy testing
- Produced precision and recalls of head and body detector using YOLO vs SSD in Linux to determine superior model

Administrative and Accounting Assistant - Kitsilano Neighbourhood House (NPO) **11/2017 – 07/2019**

- Provided front-desk customer service such as processing transactions and answering calls
- Organized documents and prepared data needed for organization tax return
- Helped the low-income community file tax return in tax clinic and participated in Canada Revenue Agency's Community Volunteer Income Tax Program

Projects

Vehicle Crop + Plate Adjust Script

- Mass processes traffic images with vehicle and plate labels using Python and OpenCV to adapt to input requirements of plate detector
- Crops all vehicles from traffic images and resizes cropped images to desired dimensions, then calculates and adjusts coordinates of plate labels to reflect change in image reference

Models Download Script

- Mass downloads Xilinx AI Model Zoo from Github using Python, os and urllib

Per-Minute-Evaluation Script

- Processes CSV files of head and body detector output by deleting repetitions and combining data, then compares to ground-truth counts per minute to generate average accuracy and error per minute of detector
- Written with Python, NumPy and Pandas

Education

University of Waterloo – Candidate for Bachelor of Computer Science **09/2020 – 04/2025**

- Courses: Designing Functional Programs, Elementary Algorithm Design and Data Abstraction, Object-Oriented Software Development
- 3.9 GPA

Awards

- British Columbia Ministry of Education Achievement Scholarship for top 5000 graduates in B.C.
- British Columbia Ministry of Education District Authority Scholarship for distinction in extracurricular activities