

George Wang

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Skills

Languages: Python, C, Java, JavaScript, Bash

Tools: Git, Jira, Linux, VS Code, Raspberry Pi (RPi)

Technologies/Frameworks: REST API, Flask, MongoDB, AWS, Docker, Android, TCP/IP

Work Experiences

Software Developer Intern - Ericsson

Jul 2019 - Aug 2019

- Developed a peer-to-peer connection over commercial networks using socket communication and VPN server to physically demonstrate low latency of the 5G network
- Created a telemetry Android client to send control signals to RPi using TCP/IP protocol
- Implemented servo motor control on RPi with Python

Projects

Google Foobar Challenge – Completed all five levels

Dec 2021

Chat Room - Real time chat application

Sep 2021 - Present

- Implemented a TCP server to allow synchronous communication among multiple clients via direct message and group chat
- Handled multiple client connections simultaneously using the select module in Python
- Plan to migrate the client end to a mobile application using React Native

VR Robotic Car - Robotic car with VR streaming of front view

Feb 2021 - Apr 2021

- Built a RPi robotic car with DC and servo motors, and a camera
- Developed a telemetry Android client to control the movement of the car and adjust the angle of the camera using UDP for communication
- Generated real time VR stream with OpenCV and displayed in browser using Flask

Smartendance - Cloud based attendance tracking application with face recognition

Feb 2020 - Jun 2020

- Developed REST API endpoints to handle asynchronous HTTPS requests in Python
- Utilized MongoDB to store and manage user account information
- Generated an SSL/TLS certificate for HTTPS connections
- Deployed on the cloud Linux machine using AWS EC2

Clubs

OpenBolty - UWaterloo Autonomous Vehicle Design Team

Jan 2021 - Present

- Explore and validate open-source autonomous driving stacks on the existing vehicle platform via simulation and test track

Head of Software - First Robotics Competition (FRC Team 7476)

Oct 2018 - Jun 2021

- Managed the software team and lead the robot code development
- Implemented robot movement control and computer vision for auto target alignment

Education

Candidate for Bachelor of Computer Science, Honours at the University of Waterloo

Sep 2021 - Apr 2026

Major GPA: 96.67 | Cumulative GPA: 87.40