Sanjay Sankaran

Aspiring Software Developer   zyugyzarc@gmail.com   (773)-669-5131

Highly motivated software developer seeking a challenging role that leverages my expertise in machine learning, data science, and full-stack development to drive innovation and deliver cutting-edge solutions. Part time student at Bellevue College.

Skills

- C/C++ with dynamic memory management, and embedded programming for microcontrollers.
- Python - backend for web, api and desktop applications
- Data Science and Machine Learning with PyTorch.
- Java - Data Structures and Algorithms.
- Arduino - Worked with programmable microcontrollers and electronics to make various devices and autonomous robots.
- Linux - System Administration, Dependency management.
- OpenGL/Vulkan - graphics programming for shaders and compositing.
- Blender - 3d modeling and CAD, Shader Programming, Video Editing, Compositing.

Projects

- Ascii-Render
  - a 3D raster engine that runs in the terminal, displaying images through text made with C++, python and cython.
- ReRoll
  - an isometric top-down maze-crawler game with randomly generated levels made with Blender (UPBGE) and python.
- Dees
  - a simple dynamic typed compile-to-executable language built with C++ and python
- D-chat
  - a decentralized peer-to-peer chat application that uses WebRTC, built with python.
- Arduino and Robotics:
  - Line Following Robots
  - Bluetooth controlled Robots
  - 6-DOF Robotic Arm
- Machine learning - research:
  - Reinforcement Leaning for self-driving autonomous vehicles.
  - Diffusion based image and audio generation (StableDiffusion with LoRA and ControlNet, Riffusion)
  - Natural Language Processing and inference with Llama, Llama 2, Alpaca, Guanaco and others.

My other projects can be found on GitHub and itch.io