Yash Sharma
yashsharma79.github.io

Professional Experience

Software Engineer/Developer Jan 2019 – Present
Yoryo Technologies (Dispatch Planning & Operations Research)

- Designed graph algorithms for satisfying vehicle capacity constraints by preprocessing input
- Improved vehicle routing algorithms by memoizing distance matrix, cutting down execution time by 70%
- Developed an asynchronous module to run resource intensive tasks on distributed servers
- Redesigned schema and authentication to make it scalable for integrating with third-party logistics

Software Engineer/Developer Jun. 2017 – Aug 2018
Quark Experiences (Virtual Reality)

- Programmed controls to manipulate machine components for design validation in VR
- Developed a networking module to stream VR from desktop to headset/mobile and keeping both visuals in sync
- Automated deployment by creating a tool to change image projection optimal for VR
- Augmented Reality mobile app to preview textile designs (1K+ downloads)

Intern December 2015
Innobytes Technologies

- Developed backend server for e-commerce website

Education

University of Pune Pune, India
Bachelors of Computer Engineering (First class with distinction) *Aug. 2013 – June 2017*

Projects

Virtual Reality to treat phobias Jan 2016 – March 2016

- Programmed interventions to navigate acrophobia(fear of heights), entomophobia(fear of insects) and claustrophobia(fear of closed spaces)
- Designed 3D scenes(graphics) and lighting to create environment required to simulate phobias

Capturing errors in industrial accidents(chemical leaks, fires) *(Independent project)* Sept 2018 – Present

- Inferred most probable sensor measurements present prior to accidents, with ML
- Currently developing model to infer causal relations that led to errors

Trust Model for Cloud Computing *(Final year project with Persistent Inc.)* Oct 2016 – April 2017

- Simulated cloud environments to evaluate their reliability(availability/downtime) and security
- Measured cloud performance against different encryption protocols and identity management levels

Technical Skills

Programming Languages: C++, Python, C, Java, C#, JavaScript
Technologies/Frameworks: Git, PyTorch, SQL, MongoDB, Redis
Tools: Unity3D, Blender, Unreal Engine

Competitive Programming

- 2 Bronze medals (World CodeSprint 8, Week of Code 24)
- Gold badge in Problem Solving – HackerRank

Online Courses

- Mathematics for CS (Eric Lehman, MIT OCW)
- Linear Algebra (Gilbert Strang, MIT OCW)