


Navraj Singh Chhina

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Skills

Languages

C++ • C • HTML5/CSS3 • JavaScript • Go • Python • SQL

Tools and Frameworks

Git • Bash • Bootstrap • MySQL • Linux

Work Experience

Team Waterloop | Back End Engineer

October 2017- Present | Waterloo, ON

- Implemented back end server in Go, reducing packet loss over high latency connection by **10%** and decreased the server load by 30% over the original **Node.js** server
- Tested and implemented **QUIC** protocol for sending sensor data packets using multiple streams, decreasing the packet transfer time by **90%** over the original **TCP** protocol

Hostinko | Front End Developer

July 2017 - August 2017 | Ludhiana, India

- Designed new webpages and front end applications using **JavaScript** and **Bootstrap**
- Refactored codebase to decrease website load time by over **10%**, benefitting over **200** clients
- Introduced effective marketing techniques and launched customer outreach campaigns resulting in an increase of over 40% in one month

Projects

VoiRate | Python • Javascript • HTML5 • CSS3

github.com/nschhina/Voirate

- Designed a web app that rates the user's presentation at **Hack The North 2017** by measuring the clarity, rhythmicity and tone of their vocal delivery
- Coded the algorithm in **Python** from scratch using matplotlib libraries with sound wave analysis

Traffix | C++ • Qt

github.com/nschhina/Traffix

- Designed a traffic simulation model using **Qt** UI to optimize and synchronize traffic lights
- Implemented shortest path algorithms, improving the traffic flow efficiency by over **70%** than the original pre-timed traffic light system resulting in faster travel in the simulated city

Education

University of Waterloo

September 2017 - April 2022

- Bachelor of **Software Engineering**

Miscellaneous

- Bhangra Folk Dance Enthusiast • Swimmer • Blogger • Cryptocurrency