Deepkanwal Dhillon

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LINKS

Github:// **dhillondeep**
LinkedIn:// **dhillondeep**

COURSEWORK

UNDERGRADUATE

Functional Programming
Object-Oriented Software Development
Logic and Computation

SKILLS

LANGUAGES

C/C++	Java
Python	GO
Javascript	Shell
Kotlin	Android
HTML	CSS

FRAMEWORKS

Java EE	NodeJS
Swing	Qt
Boost	Numpy

TOOLS

Maven	Gradle
CMake	Make
CLion	IntelliJ IDEA
SVN	Git
Pip	Bash

INTERESTS

Big Data
Embedded Systems
Back-end Systems
Graphics Design

AWARDS

President's Scholarship of Distinction
2017 | University of Waterloo

EDUCATION

UNIVERSITY OF WATERLOO

Honours Bachelor of Mathematics (BMath)
Expected August 2021 | Waterloo, ON

EXPERIENCE

AGILITY SOFTWARE DEVELOPER | AGFA Healthcare Inc

Sep 2017 – Dec 2017 | Waterloo, ON

- Designed and implemented tools to load data onto a medical dataset, a central server for all the medical images, and monitor its performance
- Developed an anonymizer for patient and medical data to protect privacy

EXTRACURRICULARS

TECHNICAL DIRECTOR | Waterloop

May 2017 – Present | Waterloo, ON

- Managed development and guided the workflow of Waterloo's hyperloop team to compete in the SpaceX hyperloop competition
- Built a memory-efficient C++ STL library for AVR chips, and a custom memory management solution for safe and efficient memory access
- Developed libraries for all the sensors used on the pod
- Created a server in Go to wirelessly communicate with the dashboard controller, and used docker to switch between devices for redundency

VICE PRESIDENT | UW Indian Cultural Association

Jan 2017 - Present | Waterloo, ON

- Organized meetup and festival events for the Indian community on the Campus
- Lead the Bhangra dance team to perform at dance events throughout the year

PROJECTS

WCOSA | AVR create, build, compile, and upload tool

- Developed in Python to make AVR project development simple
- Added support for CLion IDE and VS Code
- Provided the ability to customize Make path, CMake path and other parameters through the configuration file and command line
- Included a Serial GUI, built in Qt, to monitor Serial I/O

CRYPTOLYZER | Crypto-currency investment monitoring tool

- Built a server in Go to store investment data to a DB and use said data to provide reports and graphs
- Integrated APIs to fetch transactions and prices from exchanges
- Added the ability to define price targets to automatically buy and sell coins in the portfolio when those targets are met

CYGROSK | 2D platformer built in Java

- Developed a game engine, level editor, and a basic enemy AI
- Implemented multi-frame animations, collision detection and camera movements to enhance user experience.
- Implemented character customization by allowing for various player models

FIXED-MEMORY | Fixed size memory block pool

- Developed in C++ to provide safe and efficient memory access
- Eliminated memory fragmentation by using fixed sized memory blocks