EESHA DHANKER

eeshadhanker@gmail.com · linkedin.com/in/eesha-dhanker-929a301b4/

I am a third year Computer Engineering major at the University of Toronto, specializing in software. I am passionate about learning new concepts and am particularly interested in applying my knowledge to create computer programs to solve real world problems. I have experience with a variety of programming languages such as C, C++, Java and Python, and am good at problem solving.

EDUCATION

SEPTEMBER 2019 – APRIL 2023 (Expected)

BASC, COMPUTER ENGINEERING, UNIVERSITY OF TORONTO

RELEVANT COURSES

- Applied Fundamentals of Machine Learning
- Algorithms and Data Structures
- Operating Systems
- Object Oriented Programming
- Software Communications and Design
- Hardware Communications and Design

WORK EXPERIENCE

MAY 2023 – AUGUST 2023

SOFTWARE ANALYST INTERN, CITI BANK

- Conducted SQL queries to analyze and modify database tables
- Created a hierarchical mapping system of jobs and their dependencies
- Used python and pandas library to extract, clean and analyze credit card transaction data to determine potential patterns of credit card fraud

MAY 2022 – MAY 2023

SOFTWARE DEVELOPER INTERN, BAYER

- Full-stack development in the Radiology department for dose management application
- Implemented features in web application to send and receive medical examinations, record patient data and generate alerts when required
- Created forms for users to input patient information, and saved info to SQL databases

MAY 2020 – JULY 2020

SOFTWARE INTERN, MASHGIN

- Created computer vision programs using OpenCV and Python

- Developed programs that extract image attributes such as facial encodings from files in order to recognize faces from live and still images
- Created a database using python for reading and writing files that store image attributes such as facial encodings, names, etc.
- Researched OpenCV library for relevant functions to be used in developing computer vision algorithms

OCTOBER 2016 – JUNE 2019

TEACHING ASSISTANT, SPIRIT OF MATH

- Worked with teachers to teach students of various grades advanced math concepts
- Hosted a drop in session to provide extra help for students

PROJECTS

AI Skin Cancer Classifier

- Developed and trained a model using transfer learning to identify and classify different kinds of skin cancer
- Researched and retrieved relevant datasets to use for training
- Utilized AlexNet transfer learning model and Artificial Neural Network layers

GEOGRAPHIC INFORMATION SYSTEM

- Developed a mapping application similar to Google Maps
- Written in C++ with 2 API layers for map functionality
- Interactive UI written with EZGL and GTK graphics
- Implemented several path finding algorithms such as the Greedy algorithm

Multi-Threaded Webserver

- Implemented a buffer system for multiple threads, allowing multiple requests to be handled at once
- Utilized OS concepts such as locking, buffers, synchronization, etc. to approach the producer-consumer problem

PONG

- Recreated the classic game of Pong using OpenCV GUI/Numpy matrices
- Included user interface with a scoreboard to keep track of player scores
- See the code for this project on my GitHub: https://github.com/eesha-d/Pong

REVERSI

- Recreated a 2 player version of the game Reversi
- Involved setting up the board configuration and checking move legality for each move before proceeding to carry out the actions of the game

EXTRACURRICULAR ACCOMPLISHMENTS

- Solo piano performance at Carnegie Hall, New York – Crescendo International Competitions
- Debate club co-president at Unionville High School
- Co-founder and co-president of the University Prep club at Unionville High School
- Dean's Merit Award, University of Toronto
- 2020 Youth Impact challenge award – proposed solution for recycled/refurbished computers for low-income families