

Anshil Gandhi

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EDUCATION

Edmonton, AB

University of Alberta

Sept 2017 - April 2021

B.Sc. in Computing Science and Mathematics

Relevant coursework: Compiler Design; Database Management; Operating Systems; Graph theory; GPU programming; Theory of computation; Computer organization and architecture; Algorithms and data structures; Reinforcement learning; Functional and logic programming; Multivariable calculus; Coding theory; Statistics.

Extracurricular activities

- ❖ Veteran of the problem solving and programming club
- ❖ Software team member in AlbertaSat

EMPLOYMENT

Software Engineer

LLVM Foundation

Aug 2020 - Contd.

Part-time

- ❖ Fixing bugs in the clang compiler.

Team Lead

Canadian Organization of Undergraduate

June 2020 - Contd.

Part-time

Health Research

- ❖ Leading a team to develop an Android application to collect patients' routine and present it in an organized manner for the researchers to analyze.

Software Developer

NexOptic Technology

April 2020 - Aug 2020

Full-time

- ❖ Implemented a Tensorflow based ISP.
- ❖ Maintained and developed features for ALIIS™ on the Android platform in Kotlin.
- ❖ Improved build system for ALIIS™ by implementing CMake.

Software Developer

NexOptic Technology

June 2019 - Aug 2019

Full-time

- ❖ Developed an image streaming desktop application using dcraw, Spinnaker SDK, nuklear and OpenGL libraries.
- ❖ Optimized ALIIS™ to process 720p video and improve frame rate by 50%.
- ❖ Implemented image file converters for PNG, TIFF and DNG.

Full-time

- ❖ Refactored a Java reinforcement learning interface.
- ❖ Implemented reinforcement learning environments, including mountain car and the game of 2048.

PROJECTS

betterIR implements out-of-tree LLVM IR transformation and obfuscations.

ammoc is an LLVM-based compiler frontend for a Rust-like programming language, written in C++.

Lianshell is a UNIX-based shell program supporting process management and interprocess communication.

EulerTikz is an implementation of a force-based layout graph drawing algorithm, written in Python 3.

unixFS UNIX-based file system implementation, written in C++11, which supports features including disk mounting, file/directory creation and deletion, file I/O operations, file resize and disk defragmentation.

mapReduce library is a multithreaded application for computing word count, written in C++.

RubberDuck is a personalized competitive programming training application for the Android platform using the codeforces API.

AWARDS

Open Kattis ranked 191 out of 5000 across the world

HackerRank 6-star gold badge in Algorithms and data structures

Bronze medal in RMRC 2019 ranked third place in the ACM's Rocky Mountain Regional Contest out of 75 teams

PROGRAMMING LANGUAGES

Proficient C/C++; Kotlin; Python

Competent Rust; Java; Lisp; Prolog; Bash