

ARNAV BHARGAVA

PERSONAL PROFILE

I am a second-year Computer Science student at the University of Edinburgh on track for a 1:1 degree. I am highly analytical, self-motivated and enthusiastic learner, with knowledge in Java, C++, Haskell and Python. I have a strong focus in algorithmic design, mathematics and machine learning.

CONTACT INFORMATION



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EDUCATION

University of Edinburgh

BSc(Hons) AI and Computer Science, 2020-2024

- Introduction to Computer Systems (Grade: **A2**)
- Introduction to Computation (Logic & Functional Programming) (Grade: **A1**)
- Object Oriented Programming (Grade: **A1**)
- Calculus and Its Applications (Grade: **A2**)
- Proofs and Problem Solving (Grade: **A1**)
- Several Variable Calculus and Differential Equations (Grade: **A1**)

Katedralskolan Lund

Awarded 41 IB Points, 2018-2020

HL Mathematics, Physics, Business
SL Chemistry, English Lang & Lit, Swedish B

AWARDS & ACHIEVEMENTS

John Anderssons i Anderslöv Piano Stipendium - June 2020

Awarded scholarship for solo classical piano performance by the music faculty of Lund University.

DataFest 2020 Edinburgh - *Winner* Judges Pick
Analysed and visualised a dataset using R.

Huawei Seeds for the Future Alumni

Selected to participate in a one month long internship program offered by Huawei teaching core skills in 5G, AI, Cloud and enterprise.

Global Challenge Lab Hackathon - Participant

Invited to take part in a 10-day entrepreneurship program aimed at tackling healthcare related issues within a multicultural team.

PROJECTS

Tetris in Java

- Created a custom game loop.
- Re-created the classic game *Tetris* using JavaFX played using the keyboard with levels, scoring system and an advanced GUI.

Connect Four AI in Java

- Implemented an AI heuristic using the minimax algorithm with alpha-beta pruning for a game of Connect Four that can be played in the terminal as an extension of a coursework project.
- Gained experience in using the Model-View-Controller (MVC) design pattern in Java.

Personal Website

- Gained experience in web development, grid based layouts and reactive websites using Flexbox and Bootstrap 5.
- Learnt HTML, CSS and Javascript

ProjectFinder Android Application

- Entry for Hack the Burgh 7 (university's largest hackathon), aimed at students to find open-source projects to contribute to.
- Gained experience in Android SDK and XML

Ray Tracer

- Coded in C++ with libraries to handle matrix operations, projections and vector and tuple based operations while following the tutorial in *The Ray Tracer Challenge by Jamis Buck*
- Developed extensive unit tests using CMake.

PROFESSIONAL SKILLS

Programming Languages

Most experience: Java JDK8, Python 3, C++, HTML5, Javascript, CSS
Some experience: Haskell GHC 8.10.2, R, CMake

Frameworks

Android Studio, VS Code, Eclipse, Vim, Git, Bash,
Linux, Windows, MS Office

Languages

English (Native), Hindi (Native), Swedish (Fluent), Spanish (Beginner)

SELF STUDY

2021 Learn Python Programming Masterclass on Udemy

2020 Algorithms: Divide and Conquer algorithms, Randomized algorithms offered by Stanford University on Coursera in Java

2019 Python 3 Course 1: offered by Michigan State University on Coursera

2019 Mathematics for Machine learning: Linear Algebra offered by Imperial College London on Coursera