Sachit Lumba

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Education

School of Computer Science, Carnegie Mellon University
Bachelor of Science
Computer Science, May 2024

Relevant Coursework:
- Intro to Computer Systems
- Principles of Functional Programming
- Mathematical Foundations of Computer Science
- Concepts in AI

Dubai College
Sixth Form
A-Levels, May 2020

Relevant Coursework:
- Computer Science - A*
- Mathematics - A*
- Physics - A*
- Chemistry - A*
- EPQ - A*

Skills

Languages:
Python · C · JavaScript · Standard ML · Julia · LaTeX · Swift

Frameworks:
React · Express · NodeJS · Django · OpenCV · SwiftUI

Activities

Music
Jazz Pianist, Tabla Player, Producer

Robotics Club
Founder, Dubai College

Diving
PADI Advanced Open Water

Conservation
Operation Wallacea, South Africa, 2019

Work Experience

Fincent · Full-stack Developer — June - August 2021
- Designed and built a customer service portal for the Fincent web app
- Built and updated an ExpressJS backend along with a React Material UI Frontend
- Incorporated AWS CloudWatch Logs from the main Fincent App for use by customer service agents and ticketing management using the API for Linear
- Collaborated on the main Fincent web app, writing code to enhance the software and fix bugs

Dubai College · Teacher — June 2021
- Independently taught a mini-course on the basics of functional programming for Grade 11 Computer Science students
- Delivered 4 hour-long lessons to 2 separate class sections, designing lesson plans for each
- Covered the topics of higher-order functions and lists in Standard ML

Li2 Innovations · Programmer — July - August 2019
- Learnt the basics of C and C++, and implemented fundamental image processing algorithms using OpenCV
- Built a Python OpenCV security camera project which involved image processing, facial recognition, and video transmission
- Image thresholding, background subtraction, motion detection, face detection, TCP/UDP data transmission

Private Computer Science Tutor — February - April 2019
- Planned and conducted weekly computer science lessons for two students, covering problem-solving techniques and basic Python programming.

Selected Projects

NSC Sports · Summer 2021
- Developed a web app for the Sports Ministry of Sri Lanka to manage the athletes of various sports associations
- Improved the security of the ExpressJS backend and wrote a Material UI frontend in React

Curbon · Summer 2020
- Brainstormed and coded an iOS app to allow users to offset carbon emissions of particular clothing brands
- SwiftUI solution with a Firebase backend as well as a Stripe payment system

MUN-Net · A-Level Computer Science 2019-20
- Designed a system for Model UN organisers to set up and track conferences
- User oriented design-process consisting of multiple interviews and prototyping
- Project was implemented in Python using Django to manage the backend
- Also used NGINX, gunicorn for deployment, Material Design for frontend

Awards and Honors

- *AI Olympiad Round 2 - Jan 2020*, Placed 11th in the UAE
- *AI Olympiad Round 1 - Nov 2019*, Placed 3rd in the UAE
- *Bebras Computing Challenge - 2019*, 144/180, Second highest score in my grade
- *Silver - British Physics Olympiad (BPhO) Round 1 - 2019*, Highest score in grade
- *Gold - BPhO AS Challenge - 2019*, Highest score in grade