LAVANAY THAKRAL

lavanaythakral.github.io ⋄ linkedin.com/in/lavanay-thakral ⋄ github.com/lavanaythakral

EDUCATION

BITS Pilani, Goa Campus   *August 2016 - June 2021*
Masters in Science, Physics

BITS Pilani, Goa Campus   *August 2016 - June 2021*
Bachelor of Engineering, Computer Science

SKILLS

Programming Languages	C,C++,Python,Matlab,MySQL
Software & Tools	Google Colab, Flask, React.js, VSCode, XCode
Languages Spoken	English, Hindi, German

WORK EXPERIENCE

Blue Jeans by Verizon, Bangalore   Jan 2021-Jun 2021
Software development intern

I am currently working as a part of the Fiber Team. Fiber is the media SDK which lies between the application and the server layer and handles media streams for the BlueJeans video conferencing app. I have been working on understanding and improving the ICE implementation here. The Development is in C/C++.

MIT Media Lab, USA   August 2020 - Dec 2021
Visiting research student (**undergraduate thesis**)

I worked on building a pipeline using various open-source models to see how well a system can impersonate and improvise on a person based on their autobiography. I used large-scale pre-trained transformer models like GPT2 and BERT as primary components of the pipeline. A GAN based WAV2Lip model was used in the final impersonation demo application. This demo application was built using a Flask (Python) backend.

MathWorks, Bangalore   May 2020 - August 2020
Software Development Intern

I worked as a part of the Simulink Design Verifier team at Bangalore. The project was to build components to display the most important simulation data effectively on the Simulink canvas. My work involved development in Matlab using OOP principles.

Astech Systems, Mumbai   May 2018
Summer Intern

· As a part of my PS-1, I worked as a summer intern here. The project was to learn about different Neural Networks (especially ANN and CNN) and Optical Character Recognition. This opportunity gave me the initial exposure to ML and AI.

UNIVERSITY PROJECTS

Quantum Random Walks — Dr. Radhika Vathsan

I worked on this semester-long project to understand and contrast between quantum walks and classical random walks. We worked on understanding the applications of quantum walks in different algorithms

and the quadratic speed up they offer.
I also implemented basic Quantum algorithms like Grover's and Shor's on IBM 5-qubit online.

Studying EEG Signals and Brain Waves — Dr. Veeky Baths

This project was a study project aimed at understanding the brain's electrical activity. I understood the EEG process, the basis of brain waves, and their classifications based on morphology and frequency.

EXTRA-CURRICULAR

Guitarist, Music Society BITS Goa.
I have been an active guitarist at the Music Society, and perform live regularly.

Senator, BITS Goa.
I was Appointed by the Vice Chancellor of BITS Pilani university to represent Goa campus students' interests at the university level.