



## DHRUVA PANYAM

[GitHub](#) | [LinkedIn](#) | [YouTube](#)

[connect.dhruva@gmail.com](mailto:connect.dhruva@gmail.com) | +91 85719 77271

Bangalore, Karnataka

DoB: 16 August, 2000

## EDUCATION

PG DipASR in Computer Science	Ashoka University	2021-22	3.91 / 4 (Silver Medallist)
B. Sc. in Computer Science	Ashoka University	2018-21	3.76 / 4 (Bronze Medallist)
CLASS XII in Science and English	National Public School, Rajajinagar	2016-18	96%

## PROFESSIONAL EXPERIENCE

### Mphasis Labs | *PQC & Quantum Computing Intern*

Jun 2021 - Mar 2022

- Researched technical details of state-of-the-art (NIST) lattice-based signature schemes such as FALCON.
- Researched and improved resource estimates for quantum attack circuits; studied quantum circuit synthesis for polynomial operations.

### Koc University Summer Research Program | *Blockchain & Cryptocurrency Research Group*

Jun 2020 - Aug 2020

- Selected for 3-months KUSRP as a research member under a Ph.D. mentor from Koc University, Istanbul.
- Worked on analysing an anonymous payment scheme using Zerocoin, and cryptographic security of its public ledger systems.

### Cisco Talent Outreach Program | *App Development Team Member*

Oct 2017 - Apr 2018

- Worked on a social impact web application for 6 months with a team of 8 members under a mentor from Cisco Systems.
- Led the backend development sub-team; compiled extensive code for database management, using MEAN stack.

## PROJECTS

- **Capstone Thesis:** Wrote a thesis on estimating resources to attack AES using quantum search algorithms; improved quantum resource estimations and studied search algorithms extensively.
- **3D Ultimate Frisbee Game:** Developed a multiplayer sports game as a web application; implemented asset loading, model rigging, character controllers, gamestate FSMs, and other game engine components from scratch. (*JS/Node.js/Three.js*)
- **C sus4:** Developed an application to generate musical accompaniments to a musical/vocal melody in different themes and tones using Context Free Grammars and jazz datasets. (*JS/HTML/CSS*)
- **Personalized Eye Tracker:** Designed and implemented a deep learning model to map a specific user's eyes to screen coordinates and generate a heatmap of eye usage. (*Python/TensorFlow*)
- **RavelIO – ExcelIO:** Created an e-travel and e-commerce website using different stacks from scratch. Implemented dynamic user-based algorithms to provide personalised recommendations. (*Python-Django, MEAN stack*)

## ACCOMPLISHMENTS AND POSITIONS HELD

- **Teaching Assistant, Ashoka University** 2021
  - Selected to be a teaching assistant for a course of the Computer Science department.
- **Dean's List, Ashoka University** 2019, 2020, 2021
  - Recognised on the Dean's List for academic excellence in the 2nd, 5th, 6th, and 7th semesters.
- **Ultimate Frisbee Team Vice-Captain, Ashoka University** 2020
  - Selected to be vice-captain of the college main team for the National College Ultimate Championship.
- **School House Captain, National Public School** 2018
  - Elected by the student body to be a member of the Student Council as House Captain.

## EXTRACURRICULAR ACTIVITIES

- **Sports:** Played in multiple Ultimate Frisbee tournaments across India with college and club teams.
- **Music:** Singer-songwriter, composer, and cover artist; part of multiple A Cappella groups.
- **Cycling:** Took part in a 300-km Nilgiris fund-raising cycle ride, raising ₹50,000 to support Adivasi communities.
- **Trekking:** Participated in multiple treks organised by YHAI, including a week-long Himalayan trek.

## TECHNICAL STRENGTHS

**Languages:** Python, JavaScript, HTML/CSS, Node.js

**Topics:** Algorithms, Research, Cryptography, Web App Development