Chinmayee Phalak

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Academic Qualifications

Year	Degree/Certificate	Institute	CPI/%
2019 - Present	B.Tech	Indian Institute of Technology, Kanpur	8.1
2019	HSC(XII)	Shree Pramod Patil Junior College, Nashik	86.15%
2017	HSC(X)	Adarsh Madhyamik Vidyalaya, Nashik	98.60%

Scholastic Achievements

- Secured **99.61** percentile amongst 300,000 participants in **MHT-CET, 2019** conducted by the Maharashtra Govt.
- Secured All India Category Rank **1577** in **Joint Entrance Exam (Advanced), 2019** amongst 2,00,000 shortlisted candidates.
- Secured All India Category Rank **3655** in **Joint Entrance Exam (Mains), 2019** amongst 1.2 million candidates.

Work Experience

- **REACT DEVELOPER INTERN** | Living Desire, Delhi *(May'21 – Jun'21)*
  - Developed and Implemented **responsive user interface components** by using React concepts.
  - Developed and managed **Dashboard for the e-commerce application** and tested it internally for debugging purposes.
  - Co-ordinated with the backend developer **to integrate API in frontend** and produce well tested and high quality code.
  - Worked with UX/UI design team **to improve visible design** of the application.
- **SOFTWARE INTERN** | Samsung R&D Institute, Delhi *(May'22 – Jul'22)*
  - Developed a test application in **Tensorflow lite Micro** for deploying neural network models on embedded microcontrollers.
  - Built a **binary classification** neural network model using the TensorFlow library in python with an **accuracy** of **84.18**%.
  - Converted it into a **TensorFlow Lite model** and applied Post-training **quantisation** to make the model memory-efficient.
  - Generated a C source file for the model and executed the inference on the Linux platform.
  - The results of the quantised model closely matched those of the original model, with a **25**% reduction in the model size.

Key Projects

- **IITK COIN** | Programming Club, IIT Kanpur *Repositary* *(May'21 – Jul'21)*
  - Created a backend pseudo-currency system using **Golang** and **SQLite** as DBMS.
  - Built several endpoints for managing user authentication using **JSON Web Tokens**, permissions and transactions.
  - Protected each user's password via **Salting and Hashing** to keep sensitive information cryptographically secure.
  - Executed **RESTful API** to increase the flexibility and portability of the application.
  - Implemented **Mutex locking mechanism, concurrency, deadlock prevention** to keep transactions safe and quick.
- **CUBE SOLVER** | Speed Cubing Club, IIT Kanpur *Repositary* *(May'20 – Jul'20)*
  - Constructed a virtual Rubik's Cube using a software called **Processing 3.5.4**.
  - Implemented **Thistlethwaite Algorithm** using the C++ code, for solving the scrambled Rubik's Cube.
- **FAKE NEWS DETECTOR** | Self Project *Repositary* *(Jul'21)*
  - Built a model to classify a piece of news as REAL or FAKE using **TfidfVectorizer** and **PassiveAggresiveClassifier**
  - Obtained the **accuracy score and confusion matrix** to check how well the model fares.
  - Deployed the model using **fastapi** which allows the user to check whether a news is real or fake.

Technical Skills

- **Languages/Frameworks: C/C++**, JavaScript, **React.js**, **Node.js**, Express.js, **python**, JQuery, Bootstrap, HTML5, CSS
- **Software/Other Utilities: Processing 3.5.4**, MS Office, AutoCAD, MATLAB, LaTeX
- **Databases:** MySQL, **SQLite**. MongoDB, Mongoose

Relevant Courses   *online courses

Probability and Statistics	Fundamental of Computing	Complex Analysis
Real Analysis and Multivariable Calculus	Python for Everybody*	Partial Differential Equations

Positions of Responsibility

- **STUDENT GUIDE** | Counselling Service, IIT Kanpur *(Oct'20 – Jun'21)*
  - Provided **emotional and academic assistance** to 5 first-year students in acclimatizing to the institute's environment.
  - Served as the **first** point of contact in **the online semester** for the students and their parents.
  - Assisted Counselling Service in organizing the **1st Online freshers' Orientation programme** for **1000+** students.
- **SECRETARY** | Speed cubing Club, IIT Kanpur *(May'20 – Jun'21)*
  - **Documented and presented** the Club's summer project in front of the Science and Technology council, IIT Kanpur.
  - Helped Coordinators in presenting the club in the orientation programme for freshers.

Extra-Curricular Activities

- Attended **2nd Junior Mathematician Course** conducted in Sri Prakash Synergy School, Peddapuram, Andhra Pradesh.
- Participated in **Robotricks event** in Takneek 2019 and structured a **virtual model** of robot using AutoCAD.
- Participated in **Wild Soccer event** in Takneek 2019 and worked on mechanical structure of robot.