

# ABHINAV BOHRA

Pre-final year undergraduate, Department of Computer Science & Engineering, IIT Kharagpur, India

✉ abhinavbohra01@gmail.com

🌐 linkedin.com/in/abhinav-bohra

🐙 github.com/abhinav-bohra

🌐 abhinavbohra.technology



## EDUCATION

### B.Tech & M.Tech in Computer Science & Engineering

INDIAN INSTITUTE OF TECHNOLOGY, KHARAGPUR, INDIA

📅 Jul'18 - Present 📍 Kharagpur, India GPA: 9.39/10.0

- **Coursework:** Algorithms & Data Structures, Artificial Intelligence, Machine Learning, Probability & Statistics, Software Engineering, Computer Architecture and Organization, Operating Systems, Computer Networks, Compilers, Database Management Systems

### Class XII - Central Board of Secondary Education

📅 Apr'16 - Mar'17 📍 Ahmedabad, India Score: 93%

### Class X - Central Board of Secondary Education

📅 Apr'14 - Mar'15 📍 Ahmedabad, India GPA: 10.0/10.0

## INTERSHIPS

### ADOBE Inc., Research Intern

📅 May 2021 - Aug 2021 📍 Big Data Experience Lab, Bangalore

- Worked on automatic generation of responsive and semantic aware documents using multi-modal resources

### PHILIPS, Software Development Intern

📅 Apr 2020 - Jun 2020 📍 Philips Innovation Campus, Bangalore

- Designed, developed & deployed Machine Learning based software to predict software vulnerabilities for optimizing software testing process
- Fine-tuned various models like SVMs, Multinomial Naïve Bayes Classifier using Sci-kit Learn & LSTMs based networks using Keras to compare performance in classification task with 30+ categories
- Achieved an accuracy score of 0.963 on the test set through a Logistic Regression model built on top of tf-idf Vectorizer
- Developed graphical user interface for the toolkit using HTML5, CSS and JavaScript, and integrated it with backend using Eel

### IIM AHMEDABAD, Machine Learning Intern

📅 May 2019 - Jul 2019 📍 IIM Ahmedabad, India

- Implemented graph based topic modeling algorithm to extract 'Finance' related articles from given set of news articles

## POSITION OF RESPONSIBILITY

### BUSINESS CLUB, Head Analytics

📅 July 2020 - Present 📍 IIT Kharagpur, India

- Speaker at knowledge sessions on machine learning algorithms such as Logistic & Linear Regression, Decision Trees, Clustering etc
- Organized 1st International Edition of Indian Case Challenge, Asia's largest Case Study Competition witnessing 1,700+ participants

## AWARDS & ACHIEVEMENTS

- Secured a Department Change to 'Computer Science and Engineering' with **Institute Rank 12th among 1465 students** in first year
- Awarded **Prof. Sunil Kanti Memorial Award** for highest score in 'English for Communication' in the institute

## TECHNICAL SKILLS

- **Areas of Interest:** NLP, Deep Learning, Computer Vision, Data Structures, Algorithms, Software Development
- **Languages:** C, C++, Python, Bash, JavaScript, SQL, Java
- **Libraries:** PyTorch, TensorFlow, Keras, Sci-kit Learn, Matplotlib, OpenCV, Numpy, Pandas, Django, Flask
- **Software Packages:** Git, Jupyter Notebook, Eclipse, VSCode, NetBeans, MS-Power Point, Tableau

## MAJOR PROJECTS

### Multi-tasking Framework for Emotional Analysis 🌐

Prof. Pawan Goyal

Spring 2021

- Implemented a multi-tasking ensemble framework to jointly learn emotional classification & intensity problems
- Leveraged the representations obtained from training 3 deep NNs (CNN, LSTM, GRU) & built an MLP network on top of it
- Achieved 5.2% increase in accuracy and 0.33 increase in Pearson co-relation score for emotion classification and emotion intensity prediction tasks respectively

### HAVE: Social e-Commerce Platform 🌐

Prof. Samik Sural

Spring 2021

- Developed a Social eCommerce Platform to facilitate 'Team purchase' of online products using Django (python), HTML5, CSS and MySQL

### THAT, Hearing Assistance & Transcription 🌐

Prof. Manjira Sinha

Autumn 2020

- Developed a WebApp using Flask & JavaScript for improving online learning experience of people with hearing impairment

### Google-Audio Sensitivity Extension

Prof. Mainack Mandal

Spring 2020

- Worked on understanding user's privacy perceptions due to information overload in Google data dashboard
- Built a browser-plugin using JavaScript to extract user's Google Activity dashboard data saving their Internet charges

### GrowFast: Employee Management System 🌐

Prof. Sudip Misra

Spring 2020

- Developed an Employee-HR portal using Java, JavaFX & MySQL for managing HR activities efficiently
- Applied principles of Agile software development with a focus on flexible & quality development, and user satisfaction

## OTHER PROJECTS

- 🌐 **Peer-to-Peer Chat Application** for multiple network users. Used TCP as underlying transport layer protocol and implemented select system call through socket programming
- 🌐 **Decision Tree Classifier** using ID3 algorithm without off the shelf use. Performed reduced error post pruning to achieve 1.5% increase in accuracy on test set
- 🌐 **Naive Bayes Classifier** - Coded Gaussian & Multinomial Naive Bayes algorithm from scratch. Applied Principal Component Analysis for feature extraction
- 🌐 **tinyC Compiler** - Wrote a Lexical Analyser in Flex, Semantic Parser in Bison and Machine Independent Code Generator