

# DHRUVIL BHATT

San Francisco, CA • [bhattdb@uci.edu](mailto:bhattdb@uci.edu) • (949) 231-9789 • [LinkedIn](#) • [Portfolio Website](#)

## EDUCATION

### University of California, Irvine (Irvine, CA)

September 2022 – December 2023

*Master of Computer Science*

GPA: 3.95/4.0

Current Coursework: Advance Programming, Machine Learning, Computer Security, Operating Systems, Data Structure

### DA-IICT (Gandhinagar, India)

August 2018 - May 2022

*Bachelor of Technology in Information and Communication Technology*

GPA: 3.8/4.0

Relevant Coursework: Data Structures, Databases, Object-Oriented Programming, Computer Networks, Algorithms

## TECHNICAL SKILLS

**AWS Certified Cloud Practitioner**, Azure, Java, Python, JavaScript, Typescript, React.js, Next.js, Node.js, SQL, MongoDB, HTML, CSS, C, C#, C++, Multithreaded Programming, **Machine Learning (researcher)**, **Git**, **Linux**

## EXPERIENCE

### Synaptics Incorporated (Irvine, USA)

June 2023 – September 2023

*Audio Software Intern*

- Engineered an **Azure-based** calling application, integrating **Microsoft Graph API v1.0**, MSAL (Microsoft Authentication Library), **GraphQL APIs**, and MS Teams with Synaptics' headsets for audio testing.
- Bridged the gap between business and technology**, and integrated **speech recognition (WebServices)** feature into the Azure calling application for generating speech-to-text transcripts for headset debugging.
- Created a software application on host side to parse UART (universal asynchronous receiver transmitter) data formatted in binary HCI format. Implemented extraction of debug messages from received data.
- Honed corporate communication and interpersonal skills: Owned project delivery by **pitching to the CEO** as well as **Japanese counterparts and clients for Synaptics**.

### HuddleUp (New York, USA)

March 2022 - June 2022

*Software Engineer Intern*

- Worked in a high-growth, **dynamic, fast-paced environment** to build a custom LMS (Learning Management Systems) in collaboration with frontend team to improve productivity of client companies' employees.
- Executed web pages (using **Next.js** and Tailwind CSS) for adding new channels, challenges, and quizzes to a specific workspace, facilitating delivery of relevant skill sets to employees.

### DA-IICT Research Lab (Gandhinagar, India)

January 2022 - June 2022

*Software Engineer Intern (Computational Finance Researcher)*

- Led a team of 3 researchers in curating the **largest open-source Corporate Credit Rating dataset** using **ETL data pipeline**, consisting of 7805 data points, 4 times larger than the previous largest dataset. ([Dataset Link](#)).
- Devised a set of time-independent strategies (using **Explainable AI/ML techniques**) based on financial ratios to **help corporate firms attain investment grade rating** with a mean precision value of **95%**.
- Employed the GraphViz package in Python to visualize the **Decision Tree model** (research paper listed on **SSRN's Top 10 download list**). Utilized quantitative strengths in the creation of detailed analytical skills.

### Institute for Plasma Research (Ahmedabad, India)

October 2020 - August 2021

*Software Engineer Intern (Researcher)*

- Designed an efficient serial algorithm code in C++ for generating synthetic images of plasma.
- Collaborated with a fellow researcher to combine noises of 3 distributions to construct realistic plasma images.
- Parallelized** the serial algorithm (with OpenMP API) using **performance analysis and optimization techniques**, resulting in **2100%** growth in speedup (synthetic image of plasma created in **0.65 seconds**).

### Indian Institute of Technology (IIT) - Bombay (Mumbai, India)

April 2020 - June 2020

*Software Engineer Intern*

- Facilitated content migration from Drupal 6 and 7 websites to Drupal 8 **via custom-made plugins**.
- Migrated** [hss.iitb.ac.in](http://hss.iitb.ac.in) from Drupal 7 to 8 **with 100% retention of website content**, harnessing custom-made plugins developed for the **open-source** community. Used **Agile software development techniques**.

## PROJECTS

### DocLab - Work Smarter, Collaborate Better | *AWS EC2, React.js, Node.js, Python, Flask, Quill.js, Socket.io, MongoDB*

- Worked in a **collaborative environment** to develop DocLab, an innovative **AI-powered document editor** featuring auto text correction, paraphrasing, summarization, collaboration, and video calling support.
- Consolidated video calling and screen-sharing capabilities, ensuring a **low video/audio latency** of 300ms.
- Deployed the **Flask-based AI model on AWS EC2 for scalable and reliable access** to DocLab's AI features.
- Designed **RESTful Web Services and APIs** with Axios for seamless frontend-backend communication and MongoDB CRUD operations, ensuring fast page load time (< 2 seconds).

### Job Search Portal | *Next.js, MongoDB, Tailwind CSS, Recoil* | ([Link to web app](#))

- Launched a **responsive social media platform**, allowing users to post job seeking/opening information.
- Accomplished theme toggle between 2 themes, and utilized Google API for the latest news posting feature.
- Executed MongoDB CRUD operations using Mongoose, and utilized Recoil to manage state of application and improve performance.