# RUDRA PRATAP SINGH CHOUHAN

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#### **EDUCATION**

### Birla Institute of Technology & Science, Pilani

Bachelor of Engineering, Computer Science

August 2023 South Goa, Goa, India

#### SKILLS

C++, Python, Java, JavaScript, HTML, CSS, React, MySQL, Linux, Docker, Figma, Firebase, Amplitude, Git Version Control, Google Analytics, Communication, Collaboration

### Coursework

Course: Data Structure & Algorithm, Object-Oriented Programming, Operating System, Computer Networks, Database Systems, Computer Architecture, Design and Analysis of Algorithms, Compiler Construction

Electives: Statistical Inference & Application, Artificial Intelligence, Computational Neuroscience, Human Computer Interaction, Cognitive Neuroscience

#### WORK EXPERIENCE

### **Software Developer**

July 2022 - Dec 2022

Mewt

Bangalore, KN, India

- Developed and maintained 1 Android App (React Native) and 3 Web applications (React.JS) for fintech.
- Covered user onboarding, fraud detection (50% reduction) & UPI integrations.
- Collaborated with stakeholders during development processes to confirm creative proposals and design best practices using Figma.
- Integrated APIs streamlining data exchange and improving overall project efficiency.
- Conducted routine updates, security patches & bug fixes to maintain the software stability.

#### **Automation Engineer**

June 2021 - August 2021 Mapleton, UT, USA

Village Book | It takes a Village Developed a Chrome extension that enabled real-time language translation during video calls utilizing Microsoft's Azure translation services.

Automated an agent to enter Google Meet and record the video with transcript, and save it in Google Drive.

#### **PROJECTS**

#### Neuron Simulation & Introduction Of Noises - Computational Neuroscience

March 2023 - May 2023

- Conducted simulation of the Hodgkin Huxley model to analyze theoretical and recorded values at steady state.
- Introduced diverse noises to investigate their impact on the behavior of action potentials and currents in cells.

#### **Tetris Programming Language** – Compiler Construction

March 2022 - May 2022

- Developed and launched a **custom-designed programming language** for creating Tetris games.
- Implemented scanner and parser using SLY library in Python, and utilized Pygame for graphics rendering.

## Blink Assist – Human Computer Interaction

Feb 2022 - April 2022

- Developed software solution to improve user blinking frequency without disturbing immersion.
- Increased blink rate from 1.1 to 3.6 blinks per minute in just one hour of use by implementing screen dimming and restoration.

## Design of ALU circuits - Computer Architecture

Aug 2021 – Dec 2021

Analysing the various ALU circuit designs.

## **CERTIFICATIONS**

### Fundamentals of Deep Learning | NVIDIA

July, 2021

Building Transformer-Based Natural Language Processing Application | NVIDIA

August, 2021

VOLUNTEER

#### Teaching Assistant - Mechanical, Oscillation & Waves

Assisted with teaching and solving doubts for students on regular basis and guiding the students in the subject.

## **SCORES**

BITSAT Score: 355/420

#### EXTRA-CURRICULAR

- Won National College Ultimate Championship NCUC'23 and became the best college team of India.
- Work towards social upliftment by teaching underprivileged students and organizing fun events monthly.
- Core member of Department of Arts & Decorations. Worked on mega art structures of college fest.