

# Chebrolu Sai Prasanna Abhinav

Vijayawada, IN / Ph: +91-9515946066 / [me@abhinavchebrolu.co.in](mailto:me@abhinavchebrolu.co.in) / [LinkedIn](#) / [GitHub](#) / [Portfolio](#)

---

## EDUCATION

2020-2024	<b>VELLORE INSTITUTE OF TECHNOLOGY</b> <i>Bachelor of Technology, Major in Computer Science and Engineering; Cumulative GPA: 9.15/10</i> <ul style="list-style-type: none"><li>• <b>Awards:</b> Schneider Electric Scholarship.</li><li>• <b>Leadership:</b> Member Secretary, Student Council; Placements Co-Ordinator; Photography Club (Co-Secretary)</li><li>• Software Engineering; Operating Systems; Algorithms; Artificial Intelligence; Database Systems.</li></ul>	Vellore, IN
2020	<b>FIITJEE JUNIOR COLLEGE</b> <i>BIEAP - Cumulative GPA: 8.88/10.0.</i>	Vijayawada, IN
2018	<b>SRI CHAITANYA HIGH SCHOOL</b> <i>BSEAP - Cumulative GPA: 10.0/10.0.</i>	Addanki, IN

---

## WORK EXPERIENCE

<b>AMBIENT-BASED SMART HOME WITH EMOTIONAL INTELLIGENCE</b> <i>Developer, Intern</i> <ul style="list-style-type: none"><li>• We engineered an AI-powered system that accurately recognizes vocal and facial expressions with an 82% success rate. Systems communicate back to users, analyze users' emotions and transmit data to the central gateway for optimization.</li><li>• Developed algorithms and performed data analysis on reviews to identify and present the most relevant information on the improved course accuracy by 50%</li></ul>	Vellore, IN
<b>LG CLOUD-BASED STREAMING PLATFORM</b> <i>Executioner (on behalf of the college)</i> <ul style="list-style-type: none"><li>• Results in scalability, reliability, and elasticity. Managed data with webRTC - a centralized transform (Kubernetes engine, other microservices, and deployment strategies are utilized). Using a multi-cloud environment helps me with cost-optimization with 35% and low latency.</li><li>• Engineered a web application that enabled users to receive customized recommendations based on individual interests and performance; boosted user engagement by 40%</li></ul>	Vellore, IN
<b>VELLORE INSTITUTE OF TECHNOLOGY</b> <i>Developer</i> <ul style="list-style-type: none"><li>• Upgraded web portal from scratch with user experience and interface, minimized reading time by 40% and increased cut-point by 60%. Shifted from on-demand to the cloud.</li><li>• Designed a scalable full-stack web application using the MERN stack to support 2,000+ users; mobilized page load time by 50% and Streamlined certificate generator and transmission by creating and implementing a Python-based script; improved results by 40%, delivered using parallel algorithms to compute faster.</li></ul>	Vellore, IN

---

## UNIVERSITY PROJECTS

<b>MULTI ROUND SECURE AGGREGATION BY SOUND FOR SYSTEM CHECK USING FEDERATED LEARNING</b> <i>Mentored by Prof. Manikandan N, Prof. Ruby D. - PROJECT   SOURCE CODE</i> <ul style="list-style-type: none"><li>• Executed a Machine Learning algorithm that captured noise from IoT devices, reducing maintenance by 40% and improving equipment uptime by 30% through Federated Learning on AWS Cloud</li><li>• I researched modulation dots and signal processing techniques to optimize sound signal transmission to the central server, resulting in an 80% connection rate increase.</li><li>• Handled TensorFlow for transparency and described how data moves through a graph. The test accuracy is 76.92%</li></ul>	2023
<b>PERSONALIZED HOME SCREEN FOR GOOGLE CHROME   SOURCE CODE</b>	2023
<b>DEEP LEARNING BASED AUTOMATED IMAGE TRANSLATION FOR ANALYSIS AND DETECTION OF MALWARE IN REAL-TIME SYSTEMS – PROJECT   SOURCE CODE</b> <i>Planned with by Prof. Manikandan N, Prof. Ruby D.</i>	2022

- Detecting virus image transmissions using DL and Image Processing techniques and stopping injecting into systems.
- Contributed to Image segmentation, morphological analysis techniques, and detection of viruses using DL algorithms and achieved 74.5% of injections.

## GO NAV: AI-BASED TRAVEL PLANNER AND GUIDER – PROJECT

2022

---

### OTHER

- **Achievements:** Winner at L.G. Hacks for Ambient based intelligent home systems
- **Languages:** English (Fluent), Telugu (native), Hindi (intermediate), French (Foreign Language)
- **Coding Skills:** Python, Java, C/C++, MATLAB, Full Stack development.
- **Analytics Skills:** R Programming, SocNet-V, Excel, Rawgraphs, Flourish Studio, ZOHO Analytics, Power-BI.
- **Technical Skills:** SQL, SDLC, Cloud Computing (Amazon Web Services, Microsoft Azure, Google Cloud Platform), Information Security Analyzing, Salesforce, SAP, DevOps, Agile Computing.
- **Certifications:**  
 AWS Solution Architect & IBM-AI Professional (Ongoing), AWS Cloud Practitioner, Microsoft Azure Fundamentals (AZ-900), Google Digital Marketing, Big Data – U.C. San Diego, MATLAB (Fundamentals, Onramp, Programming Techniques), Salesforce Administrator, Hackerrank (Competitive Solving Ques., Python)
- **Volunteering:** Volunteered most of the college events and led the Riviera 2023 – Annual Sports and Cultural Fest of Vellore Institute of Technology.

---

### PATENTS

#### BANDWIDTH-BASED AUDIO AND VIDEO SPLITTING

Sept 2022 – Filed Patent under Indian Patent

- Splitting of audio and video as different instances in the cloud
- Transmitting audio when bandwidth is low by disabling video streaming.

---

### RESEARCH PAPERS

#### SOFTWARE DEFECT DETECTION AND PREVENTION IN AGILE BASED PROCESS USING ARTIFICIAL LEARNING METHODS

Guided by Prof. Manikandan N, Prof. Ruby D, Prof. Gayathri A.

2022

#### DEEP LEARNING BASED AUTOMATED IMAGE TRANSLATION FOR ANALYSIS AND DETECTION OF MALWARE IN REAL-TIME SYSTEMS

Stimulated with Prof. Manikandan N, Prof. Ruby D.

2022

#### ABNORMAL FEATURE EXTRACTION FROM EEG OF SCHIZOPHRENIA PERSON WITH SWT

Handled with Prof. Gopinath M.P., Prof. Aarthy SL.

2022