EDUCATIONAL QUALIFICATIONS

| Course/Examination | Institution/University | Year of Passing | Performance |
|---------------------------------|----------------------------|-----------------|---------------------------|
| B.Sc (Honours) Computer Science | University of Delhi | 2020 | 8.42 CGPA, First Division |
| Class 12 th (CBSE) | Modern School Vasant Vihar | 2017 | 92% |
| Class 10 th (CBSE) | Modern School Vasant Vihar | 2015 | 9.6 CGPA |

WORK EXPERIENCE

UVRobots – Mobile Robotics Engineer

[August 2020 - Present]

- Developed a Flask REST API to stream live video processed using OpenCV to generate depth maps & visualised LiDAR odometry readings
- Built a React Native application which interacts with ROS melodic nodes and turtle bot to control navigation of the robot

Omdena – Machine Learning Engineer Intern (One of the 28 Global AI experts selected)

[March – June 2020]

Performed LDA topic modelling, time series analysis, correlation & exploratory data analysis on the COVID-19 policies by the governments to understand the impact of the policies during a pandemic over the vulnerable groups. Results to be published at UN AI for Good Summit **HushTech Solutions – Co-Founder** [June 2019 - Present]

Self-taught conversational technology developer, developing omni-channel messenger chatbots powered by Natural Language Processing to help businesses automate their customer interactions, marketing and lead generation (hushtechsolutions.com)

Impute Inc. - Mobile Application Development Intern

[March - June 2019]

- Developed & extensively trained a Hybrid Chatbot with contextual conversation for Fluent8 iOS app using Node.js & Dialogflow AI
- Deployed webhooks on Firebase Cloud Function, directed fallback user queries to external APIs to enhance the conversational experience

Inverted Sense - Chatbot Development Intern

[December 2018 - March 2019]

- Built messenger chatbots for real businesses using Twilio, Chatfuel, Janis.ai. Worked on designing, building, training & testing bots
- Proposed and successfully developed an in-built shopping cart & up-selling feature which led to higher lead conversions & ROAS

RESEARCH EXPERIENCE

Department of Computer Science, University of Delhi – Student Researcher

[March - June 2020]

Built a serverless natural language web voice app for semester feedback collection. Embedded voice interaction using WebSpeech API interfaces, websocket, API.AI, Node.js webhook, GCP. Performed benchmarking, load, soak & sink testing. Research published in Springer

Artificial Intelligence Research Lab, University of Delhi – Student Researcher

[June - September 2019]

Self-initiated research work under Dr. Amita Kapoor wherein I built an Assistive System for Autonomous Vehicles based on Deep Learning & Computer Vision. Compiled Darknet with OpenCV for real-time predictions. Implemented a bash script to automate bulk testing & mAP

PROJECTS | Github : github.com/hunarbatra

- Voixt [JS, HTML, CSS, Chrome TTS] A Chrome Extension to read aloud the textual content on any browser tab, enabling TTS
- HunAl [Python, GPT] A pre-trained response generation, DialoGPT DSTC model based Telegram Bot buddy, trained on Reddit discussions
- CoRelief [React.js, Kendo UI, API.AI] NLP based web chatbot to help fight COVID-19 related anxieties & support mental health
- Real Time Voice Cloning [Python, Synthesizer, TensorFlow] Transfer Learning based voice cloning on the recorded input to create TTS
- Songify [Python, GPT 2] A GPT-2 based song lyrics generator based on a transformer natural language processing model
- Apka Chikitsak [Node.js, SSML, GCP] Multilingual voice application to provide telehealth, healthcare literacy & information to people
- Rekognition [Java, XML, ML Kit] Native Android app for Text Recognition, Object Recognition & Facial Features Recognition
- All India Emergency Helpline [Node.js, SSML, GCP] Hybrid NLP bot to provide emergency helpline info. 5K+/m users on Google Assistant

AWARDS & ACHIEVEMENTS

- Student of the Year, Department of Computer Science, University of Delhi, 2020
- First Indian to receive The Mars Generation 24 under 24 Award in Leaders & Innovators in STEAM category, 2019
- National Finalist, Smart India Hackathon Software Edition, (out of 5,000 teams) in India's largest hackathon by MHRD Govt. of India, 2019
- Highest GPA in Data Structure, Machine Learning, Computer Graphics, Android, Software Eng, System Programming, PHP, Microprocessor
- National Winner, Summer with Google (out of 20,000 participants), 2018
- World Rank 1642, Google CodeJam 2020
- Winner, Smart City Challenge, IIT Delhi, 2018
- Ideation Paper Presentation on 'Ingestible Robots' at 15th WONCA World Rural Health Conference, 2018

SKILLS

- C++, C, Python, Javascript, Java, HTML, CSS, PHP, SQL, Application Development (Native, React Native)
- Tools & Frameworks: Node.js, React.js, TensorFlow, Flask, OpenCV, Dialogflow, git, bash, Firebase, Google Cloud Platform, ROS

POSITIONS OF RESPONSIBILITY

Lead – Google Developers, Developer Student Clubs (One of the few students selected globally by Google)

[January 2019 - July 2020]

- Conducted 10+ workshops, trained 300+ students, delivered talks on Cloud, Machine Learning, Data Science & Application Development
- Facilitated GCP Crash Course, Explore ML & hackathons to foster a strong technical developer community. Supervised & led live projects

Mentor - Google Code-in at TensorFlow

[December 2019 - January 2020]

Mentored students to get started with open source developments for TensorFlow. Developed problem statements on BERT model, beginner friendly resources, reviewed submissions, provided constructive feedback & guidance

RESEARCH PUBLICATIONS

- Medbot: Conversational Artificial Intelligence powered Chatbot for delivering Telehealth after COVID-19, IEEE 5th International Conference on Communications and Electronic Systems (ICCES 2020); Urmil Bharti, Deepali Bajaj, Hunar Batra et al., IEEE Xplore [Link]
- Serverless Deployment of a Voice-Bot for Visually Impaired, International Conference on Applied Soft Computing & Communication Networks (ACN 2020); Deepali Bajaj, Urmil Bharti, Hunar Batra et al,. Springer [Link]