

Summary

Associate Software Engineer in Qualcomm, working in **Artificial Intelligence Software (AISW) CE team**. Completed B.Tech degree in **Electronics and Communication Engineering** in **June 2019**, from **National Institute of Technology, Durgapur** with a CGPA of **9.25/10**. Experienced in the field of Software Engineering, Machine Learning, Artificial Intelligence and Robotics. Published a research paper in IEEE Xplore and released 2 android apps which utilizes Machine Learning, Computer Vision and Augmented Reality. Links provided below.

International Research Publications:

Optimal Integer Order Approximation of Fractional Order Human Ear Simulator, IEEE ECTI-CON- 2018, Chiang Rai, Thailand.
[IEEE Xplore Link](#), [Certificate Link](#)

Work Experience

• Currently working in **Qualcomm** as Associate Software Engineer in **Artificial Intelligence Software (AISW) CE Team** from November 2019.

• **Summer Internship** at PricewaterhouseCoopers Pvt. Ltd. (Technology Consultant Intern) from May-July 2018. [Certificate Link](#)

• **Research Internship** at Machine Dynamics Laboratory, NIT Durgapur, India on Mobile Robotics. Guided by Dr. Nirmal Baran Hui (ME), NIT Durgapur & Dr. Aniruddha Chandra (ECE), NIT Durgapur (2018).

• **Research Internship** at Indian Statistical Institute, Kolkata, India on Computer Vision. Guided by Prof. Bhabatosh Chanda (ECSU), ISI Kolkata (2017).

• **Research Intern** at Jadavpur University, West Bengal, India on Mobile Robotics. Guided by Prof. Amit Konar (ETCE), Jadavpur University. Github [Link](#)

Certifications/Trainings

- Completed the course Applied AI with Deep Learning authorized by IBM, [Certificate Link](#), [Badge Link](#)
- Google Cloud Platform Big Data and Machine Learning Fundamentals authorized by Google cloud, [Certificate Link](#)
- Neural Networks and Deep Learning authorized by deeplearning.ai, [Certificate Link](#)
- Machine Learning authorized by Stanford University and offered through Coursera, [Certificate Link](#)
- Embedded Systems and Microcontrollers from Pracsol Technologies. [Certificate Link](#)
- JAVASCRIPT from SOLOLEARN.

Published Android Applications:

- Made an Augmented Reality Android Application which can play any video in AR over any image that the user wants. Playstore [Link](#), Tutorial [Link](#), Demo video [Link](#).
- Made an Artificially Intelligent Chatbot Android Application that responds to user's texts like a real person. [Link](#)

Published Youtube Tutorials:

- Fabricated Reinforcement Learning video tutorial series which demonstrates the steps to make an Artificially Intelligent Bot using Reinforcement Learning which can play games. Youtube [Link](#)
- RFID Smart card programming using Raspberry Pi 3 to write and fetch data to and from a server. Detailed video explanation is available at: [YouTube Link](#)

Prototypes Developed for Competitions:

- Constructed a Prototype Digital stethoscope to analyze cardiac signals in real time during auscultation to reduce the risks of not detecting certain anomalies. It was selected for the Grand Finale of Smart India Hackathon, 2018. [Certificate Link](#)
- Designed and developed a semi-autonomous robot which was capable of throwing and landing discs at precise locations. Participated in the Asian Oceanian College robot competition, ABU ROBOCON 2017 as a team representing our college with this robot.

Other Projects:

- **Smart Travel Route Finder Project:** Written in c++ using Graph Data Structure to find optimal routes between provided cities. Github [Link](#)
- Sentiment Analysis using Tensorflow. Github [Link](#).
- Simulation of **Obstacle Avoiding Bots** using **tkinter library in python**. Github [Link](#)
- Designed a short-range Quadcopter using MultiWii v2.5 SE which was controlled from an Android device via Bluetooth.
- Shape Detection using OpenCV library in python. Relevant codes are available at my Github [link](#).
- Mobile Robot controlled by a smartphone application via Bluetooth using Arduino Nano. Relevant codes are available at my Github [link](#).

Technology Skills

Software Skills

- Android Studio
- MATLAB
- SAP HANA Cockpit
- Eclipse
- GNU Octave
- LTspice
- Sketch-Up

Programming Languages

- Python
- C
- C++
- Java
- Javascript
- HTML
- CSS
- Lua

Microcontrollers and Computers used for Robotics Projects

- Arduino
- Raspberry Pi 3

Education

National Institute of Technology (NIT) Durgapur, India <ul style="list-style-type: none">•Graduate (Bachelor of Technology)•Electronics and Communication Engineering	August 2015-May 2019 Overall GPA: 9.25/10
St. Xavier's Institution, West Bengal, India Higher Secondary/+2 (Indian School Certificate), ISC Examination	2014 Percentage Obtained: 95.5%
St. Xavier's Institution, West Bengal, India Secondary (Indian Certificate of Secondary Education), ICSE Examination	2012 Percentage Obtained: 96.6%

Extracurricular Activities

- Painting, completed a course on Art
- Interested in music and can play the Synthesizer and Guitar
- Playing Chess

Position of Responsibility

- Was involved in raising funds for the Child Care Project of CCWH and RI and to help suffering children from cancer.
- Member of ROBO-CELL of Centre for Cognitive Activities(the official club of NIT, Durgapur) from 2015-2019.
- Senior Fest Coordinator in AAROHAN 2017,2018 & 2019 (Annual Techno-Management Fest of NIT,Durgapur).