

Saju Khakurel

📍 Kathmandu, Nepal ✉️ sajukhakurel9@gmail.com in Saju Khakurel 🌐 sajukhakurel074 ●● Blogs

🎓 EDUCATION

Bachelor's Degree in Electronics and Communication Engineering <i>Tribhuvan University, Institute of Engineering, Pulchowk Campus, Aggregate: 69.68%</i>	2017 – 2022 Lalitpur, Nepal
Intermediate of Science <i>Kathmandu Bernhardt College, Aggregate: 78.30%</i>	2015 – 2017 Kathmandu, Nepal

📁 PROFESSIONAL EXPERIENCE

Embedded System Engineer (Vehicle Software) <i>Yatri Design Studio</i> <ul style="list-style-type: none">• Development of full functioning Over The Air software project for bike and charging stations embedded system• Internal Server design for charging station• One wire temperature sensor, handlebar push buttons coding, OBD Flash, inertial measurement sensor	2021/04 – present Kathmandu, Nepal
Intern <i>Yatri Design Studio</i> <ul style="list-style-type: none">• Research-oriented internship in OTA programming using C/C++ language	2021/12 – 2022/04 Kathmandu, Nepal
Hardware Designer and Embedded System Programmer <i>Robotics Club, Pulchowk Campus</i> <ul style="list-style-type: none">• Design, fabrication, and testing of electronics hardware of robots for ABU ROBOCON 2019 and 2020• Hardware designing and Embedded programming	2018 – 2020 Pulchowk, Lalitpur, Nepal
Social Media Manager and Content Creator <i>IEEE-Pulchowk Student branch</i>	2021 – 2022 Pulchowk, Lalitpur, Nepal
Newsletter Editor <i>IEEE-Pulchowk Student branch</i>	2020/02 – 2020/12
Avionics system designer, Team Member <i>NEAR Aerospace</i> <ul style="list-style-type: none">• Design and manufacture data acquisition modules• Research on control and proper landings	2020/08 – 2020/12 Kupondole, Lalitpur, Nepal

📁 PROJECTS

Disinfectant Robot <i>Funded by Nepal Academy of Science and Technology (NAST)</i> <ul style="list-style-type: none">• As a part of Covid-19 related biomedical research project by NAST• Two Mobile Robots for spraying disinfectant in hospitals and quarantine areas• In collaboration with the Incubation and Entrepreneurship center (IIEC), Pulchowk Campus	2020/07 – 2021/06
Automatic Modulation Classifier using DL <i>Final Year Project, Pulchowk Campus</i> <ul style="list-style-type: none">• Mainly aiming to create a intelligent system to for the classification of incoming noisy signals using the trained DL models	2021/05 – 2022/04

- Successfully generated data sets and classified them using the likelihood method for the mid evaluation

SLAM

2020/11 – 2021/02

- Implementation of SLAM algorithm in turtlebot3 packages provided by ROS and aided by simulating as well as visualizing tools

Hand gesture controlled car

2018/01 – 2018/02

- Motion controlled vehicle from a distance using gesture controller

Rockbye Baby

2020/01 – 2020/02

AI powered Smart Cot

- Winner of LOCUS Project Competition - SDG 3 category, LOCUS 2020

VOLUNTEER AND LEADERSHIP

Instructor/Mentor

2019 – 2022

Locus 2019/2020/2022

Pulchowk Campus

- Basic and advanced hardware courses
- Breadboarding, Arduino, Soldering, Sensors, Motors, PCB design, and fabrication

Instructor/Mentor

2020/01 – 2020/02

Godawari Residential School

Godawari, Lalitpur

- Mentored middle school students for their science exhibition regarding technical projects conducted by Robotics Club, Pulchowk Campus

Conduction Committee

2020/02 – 2022/04

- IEEE Tech Talk (Feb 19, 2020)
- Blood Donation Program (Feb 19, 2020)
- Webinar on Research Methodology and Research Paper Writing (10th July, 2021)

SKILLS

C/C++, Python, KICAD, PCB Designing, Robotics, ROS, Embedded Systems

COURSES

3rd Nepal Winter School in AI, 2021

2021/12 – 2021/12

Nepal Applied Mathematics and Informatics Institute for Research

AWS Academy Cloud Foundations [5459]

2021/10 – 2021/12

Deep Learning Specialization

2021/08 – 2021/10

RADAR

2021/05 – 2021/08

Pulchowk Campus

- Elective I

Machine Learning by Stanford University

2021/06 – 2021/07