# Srijan Khadka

# Bhaktapur, Nepal

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# **EDUCATION**

Kathford International College of Engineering, Tribhuvan University, Nepal

2020-2025

Bachelor of Engineering in Electronics, Communication, and Information Engineering

#### **EXPERIENCE**

EShikshalaya Edutainment - Nepal

Jan 2025 - May 2025

#### **Chief Executive Officer**

- Started as a Volunteer  $\rightarrow$  Chief Trainer  $\rightarrow$  Head of IoT  $\rightarrow$  CEO.
- Launched the **EShikshalaya Innovation Kit**, an educational robotics and electronics kit for school-level STEM learning.
- Designed and led the SEE Success Sutra course, a structured academic support program for SEE (Grade 10) students.
- Managed and executed a 15-week national GK Quiz competition with an NPR 5 Lakh prize pool.
- Oversaw the development of online learning platforms and trained 1500+ students in technical education.

RoboKath - Kathford International College of Engineering, Nepal

May 2023 – Apr 2024

### **Project Supervisor and Mentor**

- Led training programs for 50+ students on robotics fundamentals and embedded system design.
- Supervised hands-on projects using Arduino, Raspberry Pi, and sensor-based automation.
- Mentored junior trainers and managed team coordination for technical workshops and competitions.

The BotMinds Robotics Team - Nepal

Jan 2022 - Present

# **Founder & Robotics Engineer**

- Founded and led a competitive robotics team that secured 55+ national and international titles.
- Represented Nepal at IIT Bombay, IIT Patna, and other top institutions, winning events like Robo Sumo, Robo Soccer, and Robo War.
- Promoted STEM education through outreach programs, inspiring over 500 students across Nepal.

#### **PROJECTS**

## Deep Learning Based Real Time Waste Segregation Using Robotics Arm

Aug 2024 - Mar 2025

Final Year Engineering Project

- Designed and implemented a real-time smart waste segregation system using YOLOv9 for object detection.
- Used Raspberry Pi 4B for image processing and classification, and Arduino Uno to control a robotic arm.
- Integrated conveyor belt mechanism for automated waste intake and sorting.

#### Surveillance and Rescue Rover

Aug 2023 - Mar 2024

3rd Year Minor Project

- Developed a remote-controlled rover with live video streaming using a Raspberry Pi and a camera module.
- Enabled surveillance and monitoring through a web-based interface over Wi-Fi.
- Integrated motion detection and obstacle avoidance features using ultrasonic sensors.
- Demonstrated applications in security, disaster response, and reconnaissance.

#### **ACHIEVEMENTS**

- Secured 55+ robotics titles across 30+ national and international competitions
- Recipient of the Golden Jubilee Scholarship from the Indian Embassy in Nepal for academic excellence during undergraduate studies.

# SKILLS

**Programming Language:** Python, C/C++, JavaScript **Web Development:** HTML, CSS, JavaScript, Tailwind CSS

Cloud: AWS

Machine Learning & CV: YOLO, OpenCV, TensorFlow, Scikit-learn

Databases: PostgreSQL, MySQL

**Embedded Systems:** Arduino Uno, ESP32, Raspberry Pi **Design & Prototyping Tools:** KiCAD, Tinkercad, Proteus

# **CERTIFICATIONS**

- AWS Academy Graduate AWS Academy Cloud Foundations Issued by Amazon Web Services (AWS) link
- Relational Database Certification FreeCodeCamp.org <u>link</u>
   Covered SQL, data modeling, schema design, and relational database principles.
- CanSAT Training Program NAST Nepal (Trained by Orion Space)
  Hands-on experience with telemetry systems, sensor integration, and satellite payload simulation.
- Basic Electronics Training RoboKath, Kathford International College of Engineering Focused on circuit theory, breadboarding, and electronic component handling.
- Arduino Training RoboKath, Kathford International College of Engineering
   Covered embedded C programming, sensor interfacing, and microcontroller-based system design.