# Krishbin Paudel

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#### **EDUCATION**

Tribhuvan University, Institute of Engineering, Pulchowk Campus Lalitpur, Nepal

Bachelors in Electronics Communication and Information Engineering

2019-2024

- Letter Grading: A+, Percentage: 81.92%
- Relevant Courses: Computer Organization and Architecture, Digital Signal Processing, Microprocessor,
  Digital and Analog Communication, Wired and Wireless Communication, RF and Microwave,
  Artificial Intelligence, Computer Graphics

Trinity International College, Dillibazar, Kathmandu — High School (GPA: 3.75)

2017-2019

Bagmati Boarding School, Sukedhara, Kathmandu — Secondary School (GPA: 3.8)

June 2017

#### **EXPERIENCE**

#### Product Design and Manufacture | Hydrolab

January 2024 - March 2024

- Data acquisition system to get a parallel stream of data from 32 analog pressure sensors.
- Software to remotely acquire data, calibrate sensors, draw graphs and log sensor data.
- Hardware and Circuit Design to acquire data from sensors with low noise ADC signal path.

 $\textbf{Instructor} \ | \ \textbf{Robocamp at Robotics Club Pulchowk Campus}$ 

July 2023

• Empowering students by educating them on designing and building self-balancing robots.

Hardware Communication Lead | Robotics Club Pulchowk Campus

May 2022-August 2022

- Integrating several wireless standards, Bluetooth, Zigbee and RF.
- Worked on low level communication driver development using C, C++, Rust and HAL

Program Coordinator | IEEE Student Branch Pulchowk Campus

December 2021 - February 2022

• Organized multiple programs to improve technical sight of people

# **PROJECTS**

**Autonomous Go Kart:** A vehicle architecture fabricated from bottom up with all the required chassis and core electronics components which were designed to be autonomous around our college.(<u>Article</u>)

May 2023 - April 2024

API-CORE: A cpu microarchitecture based on RISC V RV32IM core designed and tested.(Github)

Drishya: Smart goggles that detect its surrounding objects through a camera fed AI model, dictate documents through OCR to make the lives of visually impaired people easier.

October 2022-January 2023 November 2022 - December 2023

(Github) Presented at Microsoft Imagine Cup World Finals

**ABU ROBOCON 2023:** Two robots per side that hit multiple targets from a distance, one is a shooter and the other refills the ball to the shooter. Robotics competition in Asia Pacific Region.

January 2022-August 2022

JPEG Standard - Created a bitmap to JPEG converter for in game compression of frames.(<u>Github</u>)
 Yoggis- AI yoga trainer that provides real-time audio feedback to correct yoga poses
 HimAid- A low powered device for tracking live location of trekker during an avalanche

February 2020-August 2020 January 2023-June 2023

October 2022

# **ACHIEVEMENTS**

- World Finalist at Microsoft Imagine Cup 2023
- 3rd Place in ABU ROBOCON 2022
- $\bullet \qquad \textbf{Ncell Scholarship} \ \text{for academic excellence} \\$
- Winner at Hult Prize IOE Pulchowk Campus
- Winner under Health category in LOCUS Hack-a-Week
- Winner at U-TECH Hackathon Alpha
- 1st Runner-up at Ace-Ignite Hackathon
- Winner at Revampathon by Leapfrog Technology

# TECHNICAL SKILLS

#### **Hardware Skills**

- FPGA
- Microcontrollers (ARM,RISC V),
- Wireless Protocols
- Robot Operating System(ROS2),
- Circuit Design
- CAD and 3d printing

# Software Skills

- Verilog,
- Embedded Linux(Yocto, Petalinux),
- Python

- C++, C,
- Rust
- Dart
- SQL, NoSQL

# **CONFERENCES**

• 5th International Conference on inventive Computation Technologies