

## EDUCATION

**Bachelor of Engineering in Electronics, Communication and Information Engineering** Dec 2019 — Mar 2024

Tribhuvan University, IOE Pulchowk Campus, Nepal

Major Project: Detection and Locating of Humans using Thermal Infrared Images and YOLO

[PDF Link](#)

(Top 12 Innovation Category ICT Award 2023)

Percentage: 76.27%

Relevant Courses: Artificial Intelligence, Applied Data Science (Samsung), Data Structures and Algorithms, Object Oriented Programming, Big Data Technologies (Hadoop), DBMS, OOP

## RESEARCH AND ACADEMIC PROJECTS

- **Ecoweeder Agentic AI Bot Navigator:** NextJS, ROS, Gazebo, Gemini Integration [Link](#)  
Developed an autonomous navigation prototype using ROS and Gazebo simulation  
Implemented decision logic and environment interaction in a simulated agricultural setting
- **PPTGenAI:** Automatic Powerpoint Generation using Pegasus Model, Django, pegasus Transformer model, [Link](#)  
Built an AI-driven system to automatically generate PowerPoint slides from text input  
Used Pegasus transformer model for abstractive summarization  
Integrated Django backend for pipeline orchestration
- **Concealed Weapon detection using YOLO model** [Link](#)  
Developed a computer vision pipeline for detecting concealed weapons from image data  
Implemented model training, inference, and evaluation using PyTorch  
Focused on real-time detection feasibility and accuracy
- **Algae Bloom and Turbidity detection using Google Earth Engine and Python** [Link](#)  
Analyzed satellite imagery using Google Earth Engine and Python  
Applied data processing and visualization techniques to assess environmental indicators  
Built analytical dashboards for lake monitoring and decision support
- **Mobile Applications:**  
HamroMenu Github (flutter, riverpod state management), CTEVT Plus (Flutter, firebase, 5K+ downloads), Agriculture Loksewa
- **Portfolio website:** HTML, CSS, JS, Jekyll [Link](#)

## PROFESSIONAL EXPERIENCE

**QA/QC Engineer** Apr 2025 — Dec 2025  
CG Electronics Pvt. Ltd. + Droneworx.ai (part-time) Kathmandu, Nepal

- Developed interactive Power BI dashboards tracking over 35K+ service calls monthly, providing real-time insights into spare parts operations, reducing average call resolution time by 20%
- Developed a Python Selenium automation script to input pricing data for 25,000+ inventory spare parts, reducing manual data entry time by 40%
- Research and development of streamlit application for Concealed weapon detection using YOLO
- Built a Nextjs application with ROS, Gazebo simulation for making automatic weedcutter vehicle, shadcn, framer motion, leaflet.js
- Stack: Python(numpy, pandas, seaborn, scikit learn), Streamlit, Pytorch, PowerBI, Next.js, Excel, SQL, Selenium/Playright

**Frontend and AI Developer** Nov 2024 — Mar 2025  
MyNewEarth Cyprus, Europe (Remote)

- Learnt Nylo Framework to make UI and CRUD operation with Rowy firebase database
- Utilized RESTful APIs from Django, swagger documentation, Firebase CRUD operation
- Stack: Django, Nylo Framework (Flutter), APIs, Android Studio, GIT

**Co-founder and Mobile Application Developer** Apr 2023 — Nov 2024  
CTEVT Plus Kathmandu, Nepal

- Co-founded and deployed CTEVT Plus application on playstore (5K+ Downloads to get notes and pdf resources online)
- Ideation, design, implementation and release of application
- Used firebase as a backend with OAuth 2.0 Authentication
- Built and deployed website [ktmacademy.com](http://ktmacademy.com) using Github pages and AI
- Stack: Flutter, Firebase, Figma, OAuth 2.0, Dio, GoRouter, Shared Preferences, Admin Panel, Text Editor

- Created frontends for mobile application and website to facilitate hotel businesses in Nepal
- Stack: Flutter, Figma, GIT, Android SDK, Android Studio, APIs, MVC Architecture

### TECHNICAL SKILLS

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<b>Programming Languages:</b>	Python, Dart, JavaScript
<b>Data &amp; AI:</b>	Machine Learning, Deep Learning, Computer Vision, Data Analysis
<b>Frameworks &amp; Tools</b>	PyTorch, Streamlit, Django, Flutter, Power BI
<b>Applied Research</b>	Image Processing and Computer Vision, Artificial Intelligence
<b>Databases &amp; Systems</b>	SQL, Firebase
<b>Development Tools</b>	Git, LaTeX

### CERTIFICATIONS, SKILLS & INTERESTS

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- **Certifications:** AWS Academy Data Engineering ([Certificate](#)); PowerBI for Beginners ([Certificate](#)) Samsung's Artificial Intelligence ([Certificate](#)); CS50's Introduction to Computer Science ([Certificate](#)); Understanding Research Methods ([Certificate](#)); DSA and Software Engineering Bootcamp
- **Skills:** Python, Machine Learning, Flutter, Dart, REST APIs
- **Interests:** Video Making, Writing, Meditation, Running, Reading, Movies