



Institute of Engineering  
Pulchowk Campus  
Tribhuvan University  
Lalitpur, Nepal

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Er. AYUSH PARAJULI

### CAREER OBJECTIVE:

To pursue a career in the advancements in innovation and technology in a specific field such as software development, data analysis or system design aiming to make a positive impact on technological advancement and ultimately society.

### ACADEMIC QUALIFICATION:

S.N.	Level	Board	Institute	Major subject	Passed year	Remarks
1.	Bachelor	Tribhuvan University	Pulchowk Campus	Computer Engineering	2024	71.54%
2.	School Leaving Certificate (10+2)	National Examination Board	Motherland Secondary School	Math Chemistry Physics	2019	3.10
3.	Secondary Education Examination	National Examination Board	B.M.G Secondary School	–	2017	3.25

## TECHNICAL SKILLS AND ABILITIES:

S.N.	Techniques	Skills and abilities
1.	Laboratory Techniques	Proficient in utilizing laboratory equipment, conducting experiments, and managing technical systems
2.	Data Analysis	Skilled in analyzing and interpreting data using statistical methods and software tools for problem-solving and decision-making
3.	Research Skills	Capable of designing, executing, and reporting on research projects, demonstrating an understanding of research methodologies and techniques.
4.	Communication Skills	Have effective communicating of scientific finding through oral presentations, written reports and scientific problems.
5.	Technical Writing	Proficient in writing technical documents, including reports, research papers, and proposals, adhering to standards and guidelines
6.	Software Development Tools	Proficiency in utilizing software development tools and technologies, including IDEs, version control systems, debugging tools, and other software engineering tools
7.	Teamwork	Collaborative skills demonstrated through participation in group projects, team-based research, and collaborative efforts within teams.
8.	Understanding of principles	Knowledge of ethical principles and regulations governing computer engineering research and practice, ensuring adherence to ethical standards in project development and implementation.

## AREAS OF STUDY AND INTEREST:

- Data Engineering
- Data Analyst
- Business Intelligence
- Management System
- Artificial Intelligence
- Machine Learning

## Project Details:

### 1. Major Project (7<sup>th</sup> and 8<sup>th</sup> semester):

<b>Project Name:</b>	Routine Management System
<b>Project Description:</b>	The purpose of this project is to properly manage the routine by creating and assigning it to the respective teachers and digitalize the system for Department of Electronics and Computer Engineering, Pulchowk Campus.

### 2. Computer Network (7<sup>th</sup> semester):

<b>Project Name:</b>	Network design of Western Regional Campus (Pashchimanchal Campus)
<b>Project Description:</b>	Utilized Cisco Packet Tracer to design the network infrastructure for the Western Regional Campus (Pashchimanchal Campus). Developed a scalable topology, configured VLANs, and optimized IP addressing schemes

### 3. Minor Project (6<sup>th</sup> semester):

<b>Project Name:</b>	Video Captioning Model
<b>Project Description:</b>	The project aims to develop an AI model capable of analyzing videos and generating explanations of the content within them. Model interprets visual elements, providing comprehensive explanations of the video content. This project demonstrates expertise in artificial intelligence, deep learning, and video understanding.

### 4. Database Management System (6<sup>th</sup> semester):

<b>Project Name:</b>	Invigilator Management System (Continuation from Software Engineering)
<b>Project Description:</b>	This follows the continuation of previous project from Software Engineering with addition of databases and automatic systems.

#### 5. Artificial Intelligence (6<sup>th</sup> semester):

<b>Project Name:</b>	A* Algorithm
<b>Project Description:</b>	Developed a classic Snake game where the players control a snake to eat food and grow longer while avoiding collisions with walls and the snake's own body. Included features such as score tracking, game over detection, and smooth animation for enhanced gameplay.

#### 6. Software Engineering (5<sup>th</sup> semester):

<b>Project Name:</b>	Invigilator Management System
<b>Project Description:</b>	This project focuses on managing the invigilator for any exams by simply assigning them (randomly if required) to the exam room all from the system.

#### 7. Computer Graphics (5<sup>th</sup> semester):

<b>Project Name:</b>	Village Model
<b>Project Description:</b>	Developed a village model simulation using OpenGL to explore lighting, shading, and rendering techniques. Implemented dynamic lighting effects and shading models.

#### 8. Data Structure and Algorithms (4<sup>th</sup> semester):

<b>Project Name:</b>	3d Plane Visualizer
<b>Project Description:</b>	Focused on implementing mathematical equations and formulas to visualize 3D planes and their interactions effectively. Developed algorithms to render geometric shapes and analyze their intersections in three-dimensional space.

#### 9. Object Oriented Programming (3<sup>rd</sup> semester):

<b>Project Name:</b>	Space Invader
<b>Project Description:</b>	Focused on creating a classic arcade-style game, Space Invader. Implemented game mechanics, including player movement, enemy behavior, and projectile dynamics.

#### 10. C Programming (1<sup>st</sup> semester):

<b>Project Name:</b>	File pass
<b>Project Description:</b>	It is a secure file access system using password authentication. Implemented standard techniques to safeguard user credentials and file contents.

#### CO-CURRICULAR ACTIVITIES AND ACHIEVEMENTS:

- Registered **Computer Engineer** under Nepal Engineering Council (**NEC No. 87141**)
- Awarded **AWS Academy Graduate - AWS Academy Cloud Architecting** certification, demonstrating proficiency in **cloud architecture principles** and **AWS services** (2023)
- Awarded for completion of the **Samsung Innovation Campus Coding & Programming Course** in collaboration between **Samsung Nepal** and **Tribhuvan University** which happened for the first time in Nepal (2022-2023)
- Recognized for completion of the **Software Fellowship**, in which workshop focused on **Fundamentals of Software Engineering** on **Python** and **Flask development** organized by LOCUS (2020)
- Obtained **FreeCodeCamp certifications** in various topics, including:
  - **Backend Development and APIs** (2023)
  - **Scientific Computing with Python** (2023)
  - **Data Visualization** (2022)
  - **Responsive Web Design** (2022)
  - **JavaScript Algorithms and Data Structure** (2022)
- Won the category winner for **Accessibility** at **Vertex Hacks**, a **36-hour hackathon**, showcasing innovative problem-solving skills (2023)
- Obtained **Simplilearn certification** in **Introduction to Selenium** (2024)

- Led my school's house team at **B.M.G Secondary School** to win the award for "**Best Organized and Disciplined House**" demonstrating strong leadership, organizational skills, and teamwork abilities (2017)

## **PARTICIPATION:**

- **Participated in 20<sup>th</sup> National Technological Festival** organized by **LOCUS**, at Pulchowk Campus, Pulchowk, Lalitpur (2024).

## **COMMUNICATION SKILLS**

- **Languages:** Fluent in written and spoken English, Nepali and Hindi languages.

## **PERSONAL DETAILS:**

Name:	Mr. Ayush Parajuli
Date of Birth:	December 30, 2002
Gender:	Male
Father's Name:	Mr. Bandhuraj Parajuli
Permanent/Temporary Address:	Gagangauda, Pokhara-30, Kaski

## **REFERENCES:**

- 1. Assistant. Prof. Nishchal Acharya**  
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- 2. Assistant. Prof. Prakash Chandra Prasad**  
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