

# Avigya Paudel



[avigyapaudel045@gmail.com](mailto:avigyapaudel045@gmail.com)



[avigya-paudel](https://www.linkedin.com/in/avigya-paudel)



[Avi161](https://github.com/Avi161)



[avigya.com](https://avigya.com)

## EDUCATION

Union College | Schenectady, NY

Sep 2024 - June 2028

- **GPA: 4.0/ 4.0 | Honors:** Union Scholar
- **Relevant Coursework:** Introduction to Computer Programming, Honors Multivariable Calculus, Exploring Engineering, Introduction to Logic and Set Theory, Integral Vector Calculus, Radical Thinkers

## SKILLS

**Programming Languages:** Python, C, C++, Java, Javascript

**Technologies:** HTML, CSS, Node.js, Angular, React, Next.js, Git/GitHub, SQL, Flask, Arduino

**Languages:** English(Highly Proficient), Nepali(Native), Hindi(Proficient), German(Basics)

## RELEVANT EXPERIENCE

Computer Science Research Assistant | Union College

Sept 2024- Present

- Working in developing faster algorithms to find the product of two matrices with Professor Matt Anderson and a team of 6 student researchers.
- Applied the **Cohn-Umans framework** for fast **matrix multiplication** algorithms using combinatorial objects known as Strong Uniquely Solvable Puzzles (SUSP), with the potential to improve matrix multiplication complexity from  $O(n^3)$  to  $O(n^{2.505})$ .

A Levels Computer Science Tutor | *Self established paid tutoring*

Sept 2023 – Aug 2024

- Taught A-Levels Computer Science and Mathematics to **3 students** separately.
- Crafted a **step-by-step individualized course**, focusing on conceptual skills and foundational understanding.
- Took **Bi-Weekly** tests to ensure proper understanding and revision, improving grades significantly.

Web Development & Leadership Intern | *Nobel Navigators*

Aug 2023 - Nov 2023

- [Gained experience](#) on Web Development and Leadership by learning and presenting to 50+ members in EXPO.
- Developed a website using **WordPress**, featuring the **AI revolution** and presented to 65+ members at EXPO.
- Facilitated training sessions to 20+ interns on leadership and web development practices with a co-facilitator.

## PROJECTS

Automatic Pill Dispenser | Engineering Project

Fall 2024

- Designed an [Automated Pill dispenser](#) (targeting blind people), which dispenses pills using a **rotating disk mechanism** with a team of 4 students.
- Used C++ to document and integrate two servos, two sound alarms, and a button for the dispenser in **Arduino**.
- Developed an integrated [IOS app](#) which notifies when the pills are dispensed using **React Native** and **Firebase**.

AI Summariser and Translator | [Chrome Extension](#)

Dec 2024

- Developed a AI Summarizer and Translator **Extension** using HTML, CSS, and JavaScript, integrating **OpenAI's GPT-4 API** for **text summarization** and **multi-language translation**.
- Designed a responsive, user-friendly interface with dynamic options to summarize, translate, or perform both tasks seamlessly in **5 languages**.
- Implemented secure and efficient API integration, optimizing natural language processing workflows and ensuring accurate, context-aware outputs.

## EXTRACURRICULARS

- Union College 2024 **ICPC** Team Member
- Member of Union College **Google Student Developers Club**
- [Codepath](#) Intermediate **Technical Interview Prep**
- Member of **ACM-W** and **Robotics Club**
- Participant of **Goldman Sachs Possibilities Summit**
- [CS50X](#): Introduction to Computer Science | Harvard University
- National **Chess** [Competitor](#) & Event Organizer
- My Body is My Body ([MBIMB](#)) Volunteer
- Union College [Student Investment Fund](#)
- Member of **Badminton** and **Cooking Club**
- **Google** Machine Learning Course: [Certification](#)