

Gurpreet Singh

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Summary

I am an Artificial Intelligence Researcher and Student in [Endicott College of International Studies](#) at [Woosong University](#). I direct the [Cybersecurity Club](#) where students learn about Cybersecurity and Ethical Hacking and I am also an active Researcher. I am interested in Artificial Intelligence, Machine Learning, Natural Language Processing (NLP), reinforcement Learning, Computer vision etc. Previously, I obtained my Certification in Advance Cybersecurity (CACS). in computer forensics from [Cyberx Technologies](#), my Education in Artificial Intelligence from [Woosong University](#).

Education

ECIS, Woosong University | South Korea

Bachelor's Degree in Artificial Intelligence | 12/2024

- **Consistent Academic Excellence:** Maintained a CGPA of 3.9/4.5 throughout my studies at Woosong University.
- **Merit-Based Scholarships:** Awarded scholarships ranging from 50% to 70% each semester since 2021, recognizing outstanding academic performance.
- **Enhanced Problem-Solving Skills:** Developed strong problem-solving abilities through daily interactions with students and staff as a Resident Assistant.
- **Multilingual Communication Proficiency:** Strengthened communication skills by interacting with diverse international students and Korean staff, enhancing proficiency in Uzbek, English, and Korean.
- **Semester-wise Scholarships (50% to 70%):**
 - 2021: 50% Scholarship
 - 2022: 70% Scholarship
 - 2023: 70% Scholarship
 - 2024: 70% Scholarship

Cyberx Technologies | India

Certification in Advance Cybersecurity | 02/2021

- Completed coursework in **Cybersecurity** fundamentals, gaining knowledge in network security, ethical hacking, and information security management.
- Participated in hands-on training sessions focused on **penetration testing**, vulnerability assessment, and incident response.
- Developed practical skills in using industry-standard tools such as **Metasploit**, **Wireshark**, and **Nessus** for cybersecurity assessments.
- Engaged in collaborative projects to simulate real-world cyber threats and devise effective countermeasures.
- Attended workshops on emerging technologies and trends in cybersecurity, enhancing knowledge of current threats and defenses.
- Achieved training certifications in relevant areas, including **Certified Ethical Hacker (CEH)** and **CompTIA Security+**.
- Fostered teamwork and communication skills through group projects and presentations on cybersecurity best practices.

Guru Nanak Public School | India

PCM | 01/2018

- Attended School under CBSE Board in Physics, Chemistry and Mathematics

Experience

NetVision Telecom | South Korea

Data Scientist – Trash Classification & Data Augmentation | 07/2024 - Present

- **Developed multiple object detection models** by annotating a large dataset of images using **CVAT** (Computer Vision Annotation Tool) for accurate **trash classification**. Employed advanced labeling techniques to ensure high-quality annotations for model training.
- **Implemented and fine-tuned YOLOv8 and PASCAL VOC models** within the **CVAT framework**, leveraging **bounding box annotation** for precise object detection. Integrated model training pipelines with **real-time inference** to optimize performance.

on trash classification tasks.

- **Collected, preprocessed, and augmented training data** to enhance the robustness of the **trash classification models**. Utilized various **data augmentation techniques** (e.g., rotation, scaling, and flipping) to increase the diversity and size of the training dataset for better generalization.

Daejeon University - Woosong University | South Korea

Social Innovation Developer | 06/2024 - Present

- Developed a **community-focused project** for the 2024 Youth Social Entrepreneurship Hackathon.
- Collaborated in a **partnership** between **Woosong University** and **Daejeon University** to drive social impact.
- Focused on creating **sustainable solutions** for **local social issues** through innovative methodologies.
- Engaged in **multidisciplinary collaboration** with a diverse team to conduct **in-depth analyses** of community challenges.
- Brainstormed and ideated **innovative strategies** for addressing **real-world problems** utilizing design thinking principles.
- Applied **academic knowledge** in an **impact-driven environment**, emphasizing practical solutions and social responsibility.
- Strengthened **problem-solving, teamwork, and leadership skills** through dynamic interaction and project execution in a collaborative setting.

The Education Diary | India

Artificial Intelligence Instructor & Data Analytics Educator | 02/2024 - 09/2024

- Served as an **Artificial Intelligence Instructor** at The Education Diary from February 2024 to September 2024, conducting remote classes.
- Delivered comprehensive **instruction** to college students eager to expand their knowledge in **AI** and related fields.
- Developed and implemented engaging **curricula** and lesson plans focusing on **Artificial Intelligence** concepts and applications.
- Provided instruction in **Data Analytics**, emphasizing data-driven decision-making and analytical methodologies.
- Educated students in **Cybersecurity, Big Data, and Programming**, fostering a well-rounded understanding of technology.
- Facilitated interactive learning experiences, enhancing student engagement and knowledge retention through **practical applications**.
- Collaborated with a team of educators to continuously improve course materials and teaching methodologies.

Daejeon Support Center for Foreign Residents | South Korea

D-Buddy Global Supporter – International Outreach Specialist | 05/2024 - 07/2024

- Served as a **D-Buddy Global Supporter** at the Daejeon Support Center for Foreign Residents from May 2024 to July 2024, working on-site in South Korea.
- Promoted Daejeon as an attractive destination through targeted **social media campaigns** aimed at the Indian audience.
- Created engaging and informative **content** highlighting the cultural, educational, and recreational opportunities available in Daejeon.
- Collaborated with local organizations and stakeholders to enhance community engagement and awareness of Daejeon's offerings.
- Utilized **digital marketing strategies** to effectively reach and resonate with potential visitors and residents from India.
- Actively participated in events and initiatives to foster cross-cultural connections and support for foreign residents in Daejeon.

Mentorless | India

Machine Learning Engineer Intern – Applied Machine Learning | 03/2024 - 07/2024

- Engaged in a **6-month internship** with Mentorless, focusing on hands-on experience in **machine learning (ML)** projects and real-world applications.
- Contributed to diverse **ML tasks and responsibilities**, enhancing practical skills and knowledge in a dynamic and evolving field.
- Collaborated with team members to develop and implement **applied machine learning** solutions, improving efficiency and effectiveness in various projects.
- Gained insights into **machine vision** technologies, leveraging them to enhance project outcomes and tackle real-world challenges.
- Developed proficiency in using **machine tools** and design principles, contributing to the overall project development process.
- Participated in ongoing training and workshops to stay updated with the latest trends and advancements in machine learning and AI technologies.

SeAH Steel | South Korea

Capstone Project Developer – Computer Vision Specialist | 03/2024 - 07/2024

- Contributed to a **capstone project** with SeAH Steel, a premier steel manufacturing company in South Korea, focusing on the detection and extraction of ID numbers from defective steel bars, particularly those exhibiting “ears.”
- Developed an advanced **computer vision program** utilizing **object detection** and **image segmentation** techniques to identify “ears” on steel bars captured by CCTV within a critical time frame of 5 seconds per bar.
- Implemented **individual bounding box detection** for □180 angle rolled billet bars, successfully identifying and quantifying ear areas and lengths based on detected masks to ensure compliance with accuracy standards.
- Collaborated with a **multidisciplinary team** to optimize the program's performance and ensure its seamless integration into SeAH Steel’s production environment, addressing operational requirements and constraints.
- Conducted **algorithm analysis** to refine detection techniques, enhancing the program's effectiveness in real-time scenarios.
- Leveraged **data processing** skills to manage and analyze visual data, contributing to the overall quality control processes in steel manufacturing.

Solbridge | South Korea

Resident Assistant – Student Support Specialist | 10/2021 - 02/2024

- Served as a **Resident Assistant** at Solgeo Dormitory, Woosong University, for **6 months**, enhancing student support and community engagement.
- Developed **problem-solving skills** by addressing student concerns and complaints, fostering a positive living environment.
- Strengthened **communication skills** through interactions with a diverse population of international students and Korean staff, improving proficiency in **Uzbek, English, and Korean**.
- Managed the **check-in/check-out** process for residents, ensuring a smooth transition for incoming and outgoing students.
- Conducted daily **room checks** to maintain cleanliness and safety standards within the dormitory.
- Oversaw **facility maintenance** and reported issues to ensure a comfortable living space for residents.
- Regularly communicated dormitory rules and guidelines to students, promoting a respectful and compliant community atmosphere.
- Assisted in **dormitory administration** tasks, supporting the overall management and operation of the residence.

Skills

Azure, Communication Skills, Analysis Skills, Agile, Microsoft Office, Linux, Java, AI, ML, NLP, Computer Vision, IoT, Cybersecurity

Languages

English, Hindi, Korean, Panjabi, Punjabi, Urdu, Uzbek

Certificates

Certification in Advance Cybersecurity (CACS), Privileged Access Management, MITRE ATT&CK Defender™ (MAD) ATT&CK® SOC , MITRE ATT&CK Defender™ (MAD) ATT&CK® Fundamentals, Introduction to IT & Cybersecurity, Developing Effective Certification Preparation Strategies, Creating a World Class Security Operations Center (SOC), Ethical Hacking™

Awards

Woosong University Scholarship Foundation Program 2024, 세아스틸과 공동으로 진행하는 캡스톤 프로젝트 1위, Global Leader at 대전광역시 외국인주민 통합지원센터 2024, 우송대학교 사이버보안동아리 회장 2024 년 01 월, 우송대학교 배움콘서트 (컴퓨터 네트워크) 2022 년, 우송대학교 학습콘서트(IoT) 2023 년, 자연어처리인턴십2024 년, 세계지방정부연합(UCLG) | 국제기구회의의 2022 년, 통합사이버올림피아드(UCO)전국랭킹 1186:2011 년, 고급 사이버 보안 자격증 (CACS) 2020, 2nd Prize in Short Movie in Woosong University