

John Choi

github.com/johnchoi44

(814) 280-7794

psuybc5222@gmail.com

linkedin.com/in/choi-yongjun/

EDUCATION

The Pennsylvania State University
B.S. in Computational Data Science
Minor in Mathematics

Anticipated graduation: Spring 2025
University Park, PA
Cumulative GPA: 3.87/4

PROFESSIONAL EXPERIENCES

Machine Learning Engineer

Nittany Ai Advance

Aug 2024 – Present

University Park, PA

- Collaborated with the PlantVillage team, a global nonprofit and research lab, to develop a computer vision model using **Python** and **TensorFlow** with **EfficientNetB3** as the base architecture to classify soil moisture ranges based on plant leaf images
- Developed an advanced outlier detection algorithms using **Python**, **PyTorch**, **PCA**, and **KMeans** clustering to successfully classify about 99% non-leaf images from agricultural datasets containing over 1M images stored on Amazon **EC2** instance

Data Science Intern

Advanced Nano Products Co., Ltd (ANP)

May 2023 – August 2023

Daejeon, South Korea

- Centralized and managed 1000+ physical company contracts by classifying and digitalizing them into an electrical database, significantly improving accessibility and optimizing workflow efficiency

AI Engineering Intern

Cybermed Inc.

February 2022 – May 2022

Daejeon, South Korea

- Designed an algorithm model to automate the processing of \$10K+ worth of software sales optimizing internal process
- Crafted a customer service chatbot and integrated to the system through KakaoTalk API to boost convenience for both customers and employees, utilizing **SQL** to analyze and interpret historical customer inquiries to model the chatbot

Military Police Sergeant and Squad Leader

Republic of Korea Air Force – 17th Fighter Wing

May 2020 – February 2022

Cheongju, South Korea

- Supervised a team of 50+ military police soldiers, providing training, guidance, and coordination during operations
- Mediated disputes among military personnel and civilians, utilizing effective communication and negotiation skills

Intelligent Infra, Technology Research Center Intern

Korea Institute of Science and Technology Information (KISTI)

September 2019 – December 2019

Daejeon, South Korea

- Conducted an in-depth investigation in Lightweight Deep Learning Model techniques, working closely with post-doctoral researchers engaging in hands-on research and practical implementation of neural network utilizing **PyTorch** and **Caffe**

PERSONAL ACHIEVEMENTS

Vibe.AI (Senior Capstone Project) – Full Stack Developer

August 2024 – December 2024

- Led the team in an agile environment to design and develop a customizable web platform for voice and music cloning using **React.js** and **Node.js** integrating Play.ht and Musicfy API for text-to-speech and song cover generate capabilities

HackPSU – Best Use of Google Cloud 1st Place, Overall 2nd Place, Nittany AI 2nd Place

October 2023

- Developed user messaging web platform using machine learning AI and real-time database, finding compatible match of people using matching algorithm based on MBTI which is refined through sentiment analysis from users feedback
- As backend developer, utilized Google Cloud **Vertex AI** API for machine learning and AI capabilities of the project
- Created and deployed the algorithm model to **Node.js** backend by training the model using Google Cloud **AutoML**

Hacking for Humans Development Club – Event Planner

January 2023 – Present

- Reached out to local restaurants and startups to design and launch their official websites using **React** and **Node.js**, enhancing their digital presence with consistent communication and consulting with the clients

Workplace Social Media Activity – Undergraduate Research

July 2023 - Present

- Guided the team to develop a model to scrap lawyers' information and Twitter tweets from 200+ U.S. law firms utilizing **Python** libraries and Twitter API to conduct data preprocessing and sentiment analysis in large and complex datasets

American Statistical Association Data Fest™ – Best in Show 1st Place

March 2023

- Led the team to analyze and interpret real-world datasets provided by the American Bar Association using data preprocessing, statistical analytics, and data visualization with **R** and **Python** to design an attorney matching platform

SKILLS

Programming Language: Python | SQL | Java | R | JavaScript

Application/Software: Tableau | Django | Figma | React.js | Node.js | Firebase | Google Cloud | Spark | Caffe | PyTorch | Tensorflow