

# Tisya Vaidya

State College, PA

[tmv5264@psu.edu](mailto:tmv5264@psu.edu) | 582-203-9626 | [www.linkedin.com/in/tisya-vaidya](https://www.linkedin.com/in/tisya-vaidya) | <https://github.com/tisyavaidya>

## EDUCATION

Pennsylvania State University, College of Engineering – University Park, PA

Bachelors in Computational Data Science

*Minor 1: Mathematics*

*Minor 2: Statistics*

May 2025

GPA:3.22

## RELEVANT EXPERIENCES

Penn State College of Engineering- State College, PA

August 2023- present

Learning Assistant and Grader for CMPSC 221 (OOP in JAVA)

- Assisted in teaching responsibilities and provided one-on-one support to students during office hours, addressing their questions, clarifying doubts, and guiding them in problem-solving strategies for 10 hours per week.
- Evaluated and graded programming assignments and exams of 35 students ensuring fairness and offered constructive feedback on students' code and assignments.

LTI Mindtree- Mumbai, India

May 2024- July 2024

Generative AI intern

- Conducted research and implemented advanced image generation techniques using models like DALL-E and Gemini, developing high-resolution 3D images with various tools and platforms to ensure quality and accuracy
- Analyzed the instruction based image editing research paper and contributed to the development and testing of code for instruction-based image editing, enhancing image manipulation capabilities.
- Implemented and tested background removal functionality using Microsoft Azure AI services, achieving successful and efficient results.
- Developed and optimized web scraping scripts to extract product details from eBay using frameworks like Scrapy, BeautifulSoup, and Selenium, automating data collection processes.

Tata Consultancy Services(TCS)- Thane, India

June 2023- July 2023

Data Science Intern

- Utilized SAP BW4 HANA and Google Looker to convert over 10000 rows of raw client data in Excel into easily accessible and clean data, ensuring data integrity and accuracy.
- Conducted thorough data analysis and performed data cleansing activities to eliminate inconsistencies and errors, enhancing the overall quality of the data.
- Developed a front-end software solution utilizing SAP Appgyver platform and through collaborative efforts seamlessly integrated the front end with back-end.

Women in Engineering Program (WEP)- State College, PA

August 2022- present

Facilitator

- Mentored 20 first year students CMPSC 131-python following a common core-aligned curriculum
- Designed, wrote and implemented 16 engaging lesson plans for CMPSC 131, python course
- Modified assignments, exercises and tests to help students prepare for exams

## RESEARCH PROJECTS

Enhancing Hate Speech Detection Through Multi-Model Ensembles

August 2024- December 2024

Developed an advanced hate speech detection system by building on insights from prior works, integrating transformer models (BERT and RoBERTa), ensemble techniques, and innovative preprocessing methods to significantly enhance performance on imbalanced datasets.

Research Assistant at Penn State College of Engineering: RLS Model

May 2024- August 2024

Conducting research on enhancing the robustness of Recursive Least Squares (RLS) models in MATLAB, aiming to minimize the influence of outliers on model performance.

**Programming Skills:** Python, JAVA, R

**Data Management:** MySQL, NoSQL

**Technical Expertise:** Machine Learning, Artificial Intelligence, Data Structures and Algorithms, Web Scraping

**Software used:** MATLAB, Azure, Dalle, Gemini, Microsoft Excel, Google Looker, SAP BW4 HANA, SAP Appgyver