Alex Puskaric

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EDUCATION

Washington & Jefferson College, Washington, PA — *Bachelor of Computing & Information Studies*
Emphasis: Data Science | Minors: Mathematics, German
August 2021 - May 2025

- Cumulative GPA: 3.74
- Awards/Honors: CIS Award for Independent Learning, Presidents Athletic Conference Honor Roll, Dean's List
- Extracurriculars: Track & Field Team, Delta Phi Alpha German Honor Society, Pi Mu Epsilon Math Honor Society

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EXPERIENCE

Washington County IT Department, Washington, PA — *Service Learning Project*
January 2025 - April 2025

- Collaborated with clients to define project scope, deliverables, and development milestones for an asset map solution.
- Worked in a team of three to design, develop, and deliver a web-based internal asset map application.
- Developed a scalable, tabular asset map using CSS and HTML to track the county's security cameras, AEDs, and time clocks, improving asset management efficiency.

Jaster, Pittsburgh, PA — *Product Development Intern*
June 2024 - August 2024

- Utilized Python to connect to Spotify and Genius APIs to scrape popular songs and their lyrics to build a Django web app that vectorized the lyrics into usable tokens for a caption recommendation system for social media posts.
- Read through the documentation and case studies of various helpdesk software and condensed the information into an easily digestible report, providing actionable recommendations for Jaster's choice of helpdesk software.

Norwin School District, North Huntingdon, PA — *Summer IT Intern*
June 2023 - August 2023

- Collaborated with peers to install, set up, and troubleshoot various IT systems and maintained a comprehensive database of the district's smart devices.

Washington & Jefferson College, Washington, PA — *CIS Peer Tutor*
August 2023 - May 2025

- Assisted students with coursework involving Java, Python, Databases, Data Analytics, and Photoshop.

INDEPENDENT STUDY - https://xanderap25.github.io/Study-Site/

An Exploration of LLMs for Storytelling — **AI, Fine-Tuning, Prompt Engineering, Hugging Face, Torch, Transformers**

- Fine-tuned a Mistral 7B model using QLoRA to develop an LLM tailored for German Fairy Tale generation and engineered in-context learning prompts for story generation.
- Analyzed the outputs of a baseline pretrained model, fine-tuned model, and baseline model using in-context learning prompts with NLP techniques, such as Monroe's Fighting Words algorithm and Word Feature extraction.
- Developed a study website using Jekyll and Github Pages and wrote content on the use of AI for an undergrad-level audience.

PROJECTS

Worldwide Cybersecurity Trends Analysis — **Python, Numpy, Seaborn, Pandas, Sklearn, Tableau**

- Conducted data analysis on a dataset on worldwide cyberattacks from 2014 to 2024 to uncover patterns and correlations on cybercrime on a global scale.
- Used Sklearn to create multiple Naive Bayes Classifiers that provided insight into actor and target countries, and months of the year in which cybercrime is more prominent.
- Developed a Tableau dashboard to visualize key information and communicate my findings to peers.

D3 Track Analysis — **R, ggplot2, dplyr, rvest, httr**

- Used rvest to webscrape tfrrs.com for data on D3 athletes in the Spring 2023 season, and used httr to obtain usable information from the scraped html, and dplyr pipelines to transform the data into a usable state.
- Developed a report on the analysis of the runners and created linear regression models on their performances to predict potential in other events.

Aquaculture Simulation — **Python, Numpy, Matplot**

- Researched aquatic ecosystem dynamics and developed mathematical models in Python to simulate fish growth, plant development, and chemical cycles (e.g., ammonia to nitrate conversion)

- Visualized simulation results using Matplotlib to track chemical levels, plant biomass, and fish population over time.

SKILLS

- **Programming:** Java, Python, R, Lua
- **Data Analytics & Data Visualization:** MySQL, PostgreSQL, Machine Learning, PyTorch, Bayesian Statistics, sci-kit learn, Tableau, Matplotlib, ggplot2, Seaborn
- **Tools & Systems:** Jupyter, Google Colab, Git, Docker, CI/CD, Microsoft Suite, JAMF Systems
- **Mathematics:** Statistics, Calculus, Linear Algebra, Combinatorics
- **Other:** UML, Information Security fundamentals, Agile, Design Thinking, Project Management, Prompt Engineering