# Jonathan Essis

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## **Summary**

Fullstack Engineer with a proven record in technical presentations and solution engineering. Successfully delivered mobile applications and integrated AI-driven features while collaborating with cross-functional teams to support pre-sales initiatives. Proficient in Python and TypeScript, with a solid understanding of software development life cycles, continuous integration, and deployment, poised to drive customer adoption and technical evaluations.

#### **Education**

## The Pennsylvania State University

2024

B.S, Computer Science, Mathematics, Music Technology

## **Experience**

Kouris LLC Jun 2024 - Dec 2024

Fullstack Engineer

Remote

- Developed a full-stack mobile application using React Native (TypeScript) with Node.js/Python backends and PostgreSQL, providing technical demonstrations of adaptive AI features and detailed data visualizations for 20,000 users.
- Collaborated with project managers and product designers to integrate a custom-trained Siamese neural network, enhancing the application's capability to learn item compatibility—demonstrating strong technical communication and presentation skills.
- Integrated concurrent API pipelines (Cloudinary, Lykdat, Serpapi, OpenAI) to automate image detection and metadata extraction, showcasing technical proficiency and the ability to support pre-sales technical evaluations.
- Introduced new AI techniques that resulted in a scalable recommendation engine, reinforcing a foundational understanding of SDLC and continuous integration/deployment best practices relevant to technical pre-sales environments.

KPMG Jun 2022 - Sep 2023

Software Engineer Intern

Remote

- Executed comprehensive UI testing on the Ignite AI platform, identifying and reporting over 300 bugs to enhance document ingestion and annotation workflows, thereby strengthening communication of technical issues and solutions.
- Developed and deployed prototype applications on AWS, Azure, and GCP to benchmark enterprise NLP solutions against KPMG's in-house platform, illustrating technical presentation skills aligned with pre-sales proof-of-concept initiatives.
- Led a computer vision project by prototyping a gimbaled face-tracking camera using deep learning, presenting a fully functional model that demonstrated technical expertise and facilitated customer technical evaluations.
- Collaborated within an agile, cross-functional team using Docker and DevOps practices to streamline back-end development, emphasizing proficiency in continuous integration and continuous deployment important for technical strategies.

#### **Projects**

## **Outfit Recommendation System API**

- Engineered a machine learning API using a Siamese neural network to generate personalized outfit recommendations by processing raw JSON/CSV wardrobe data
- Developed modular data preprocessing and training pipelines in Python, integrating visualization tools to monitor model performance and optimize compatibility scoring
- Implemented a RESTful API with comprehensive logging, enabling real-time recommendation serving and efficient troubleshooting during experimental testing

#### RaffleLeader

- Reworked PHP, HTML, and CSS to reposition the toolbar per project lead's request, streamlining user interactions in a WordPress raffle plugin
- Developed a standalone React web app prototype in Javascript, CSS, and, HTML that reimagined the raffle system's front-end, modernizing the interface and enhancing usability

#### Skills

- Backend: Python, NumPy, TensorFlow, PyTorch, Matplotlib, Flask, Node.js, Java, C, C++, PostgreSQL, SQL
- Frontend: React, React Native, TypeScript, HTML, CSS
- Development Tools: Git, Docker, DevOps, SDLC, Continuous integration, Continuous deployment, GitLab knowledge
- Soft Skills: Technical Writing, Documentation, Data Visualization, Debugging, Testing, Presentation Skills, Customer relationship management, Market knowledge