JOSHUA SHUNK

+1(480) 489-2772 \diamond Stanford, CA

 $joshuashunk@gmail.com \diamond linkedin.com/in/joshuashunk \diamond joshuashunk.com/in/joshuashunk \diamond joshuashunk.com/in/joshuashunk \diamond joshuashunk.com/in/joshuashunk \diamond joshuashunk.com/in/joshuashunk \diamond joshuashunk.com/in/joshuashunk \diamond joshuashunk.com/in/joshuashunk \Rightarrow joshuashunk \Rightarrow joshunka \Rightarrow$

SUMMARY

Software Engineer with 2+ years of experience in Data Science and ML. Currently working on predictive algorithms and computer vision @Honeywell to improve integrated supply chain efficiency. Previous research intern @Arizona Science Center responsible for the design of new exhibits and the creation of a new data pipeline for data analytics.

EDUCATION

Bachelor of Computer Science, Stanford University Relevant Coursework: CS106B Programming Abstractions, CS107 Computer Organization and Systems, CS109 Introduction to Probability for Computer Scientists, CS148 Introduction to Computer Graphics and Imaging, CS103 Mathematical Foundations of Computing, and E40M An Intro to Making: What is EE

Member of the Association of Computing Machinery and CFO of Stanford Hockey

SKILLS

Programming Languages	Python, JAVA, C++, C, SQL
Frameworks/Tools	TensorFlow, PyTorch, Scikit-learn, NumPy, Pandas, React, Flask, Firebase
$\rm DevOps/CI/CD$	Azure, AWS, Databricks, Snowflake

EXPERIENCE

Data Science/ML Intern Honeywell Jun 2024 - current Charlotte, NC

Jun 2023 - Sep 2023

Phoenix. AZ

- Used PyTorch forecasting to achieve a 15% higher accuracy for future needed part quantity prediction.
- Lead engineer on *Optic*, a end to end computer vision application for monitoring supply chain effeciency.

Research Intern

Arizona Science Center

- Led initial drafts of a new water atrium exhibit to be implemented in late 2024 or early 2025.
- Developed hand-tracking software to allow for hands-free control of Google Earth with millimeter accuracy.
- Created a new data analytics pipeline linking ticking software to various dashboarding tools.

PROJECTS/RESEARCH

Neuron-specific Dropout An innovative approach to regularization in neural networks, which reduce overfitting and the dependence on large training datasets by up to 90% by selectively deactivating neurons. Worked with postdoctoral researcher Dr. Ben Lengerich on further developing Neuron-specific Dropout after initial development. Recognized internationally and led to the invitation to the 2022 Nobel Prizes. (arXiv paper)

Diffreatiate COVID-19 X-ray with Machine Learning Built a custom convolutional neural network that achieved a greater than 90% accuracy in differentiating COVID-19 pneumonia from bacterial pneumonia. Built a doctor-friendly UI using flask to upload, save, and make predictions on patient images.

Personal Website Designed from scratch, a personal website to show off research, projects, and general information about me to future recruiters or potential collaborators. Used React, Next.js, MongoDB, and Node.js to manage custom API calls to the webpage. (visit)