# Surya Salem

(469) 534-9027 | suryasalem24@outlook.com linkedin.com/in/suryasalem | suryasalem.github.io

### **EDUCATION**

Purdue University

Aug 2020 - May 2024

- Major: B.S. in Computer Science, focus on ML, AI, and SWE

GPA: 3.4

- **Minor**: Management
- **Coursework**: Data Mining & Machine Learning, Intro to Analysis of Algorithms, Software Testing, Web Info Search & Management, Programming Languages, Systems Programming, Operating Systems, Data Structures & Algorithms
- Skills: Python, R, C, Java, HTML/CSS/Javascript, SQL, ARM Assembly, Scala, Haskell, Rust, Azure, AWS, Git, Github, Figma

# **WORK EXPERIENCE**

## **LEIDOS - Software Engineering Intern** (Vulnerability Management)

May 2023 - Jul 2023

- Enhanced security infrastructure by cross-referencing 1000+ IP addresses between Tenable Security Center & Splunk, resulting in a comprehensive list of missing IPs and repositories for over 100 environments.
- Developed Python scripts to simplify IP list comparisons and application usage, increasing workflow efficiency.
- Monitored various sites for new major vulnerabilities daily to report findings to my team and created a **Quick Reference Card (QRC)** on how to make morning reports for future use by the team.

## **ALIGN TECHNOLOGY - Data and Analytics Intern**

May 2022 - Aug 2022

- Increased accuracy of data analysis performed on the European dataset by designing an autonomous solution to provide default values for empty data fields while streaming from **EventHub** to **Data Lakes**.
- Applied security policies utilizing Azure Keyvault for credential confidentiality across multiple projects.
- Consolidated multiple **Databricks** notebooks to process **Avro** & **JSON**-based topics from **Kafka**, allowing multiple teams to work on either platform, increasing workflow efficiency.
- Validated tested proof of concept in the development and QAS environment with over 20+ dynamic test users.

#### **PROJECTS**

Freelance Work | Cryptocurrency, OpenAI API, Web Speech API, Discord API

May 2021 - Present

- Developing an AI chatbot utilizing the OpenAI API & Web Speech API and integrating it into a Discord bot.
- Building PCs & crypto mining rigs from Intel, Nyidia, and AMD chips to suit client needs & providing customer support.

#### **DripDrop** | React, Figma, GraphQL, AWS Amplify, Agile

Jan 2024 - May 2024

- Created a full-stack social media fashion platform allowing users to friend, battle, vote, comment, and rank posted outfits
- Involved in developing core functionality & dev tools, and worked with designers to iterate on interactions & UI/UX.

## Entity-Relationship Diagram (ERD) Classification | sklearn API, nltk API, PyTorch

Nov 2023

- Classified images of ERD diagrams into groups based on content employing sklearn & nltk Python libraries.
- Used **Object Detection (OD)** & **Object Character Recognition (OCR)** to interpret text from diagram images, then applied a **K-Means** clustering algorithm to group them.

## **StemSpace** | React, Node.js, MongoDB, Spring Boot, Agile

Jan 2022 - May 2022

- Delivered a simple social media platform allowing users to post, comment, follow topics, & directly message other users.
- Tasked with user interface functionality across the website along with user authentication.

### Microsoft | Databricks, Reddit API, Instagram API, Agile

Aug 2021 - May 2022

- Partnered with Microsoft to build social listening tools to analyze influencer activity in the Minecraft community.
- Analyzed **Reddit** data & devised a script to download **13,000+ Instagram posts** and post data to categorize art styles.
- Gauged community sentiment's impact on player engagement; presented influencer marketing & findings to stakeholders

## John Deere | OpenCV, Google Earth Engine API, Neural Networks, Agile

Aua 2020 - May 2021

- Partnered with John Deere to build a boundary detection algorithm on golf courses through image processing.
- Applied edge detection filter methods & HSV masks to satellite images to better capture golf course boundaries.
- Achieved an increased accuracy of 100% over the average of 700 images when tuned for a specific golf course image.

#### **EXTRACURRICULARS**

## ADVNT - Performance Team Member

Jan 2023 - May 2024

- Pre-professional dance organization that performed throughout the Midwest; Achieved 2nd place at Indy Open'24

# ASSOCIATION of SOUTH ASIANS at PURDUE (ASAP) - Co-founder & Vice President Internal

Aug 2022 - May 2023

- Provided a community for South Asians to share their culture with other Asian organizations and students
- Guided other members of the board on how to best utilize the organization's resources for events & mitigating conflicts.