TEJA GURUVELLI

US Citizen | gguruve@clemson.edu | linkedin.com/in/tjguruvelli | github.com/tj-guruvelli

EDUCATION

Georgia Institute of Technology **Atlanta, GA**
M.S. Cybersecurity *May 2027*

Clemson University **Clemson, SC**
B.S. Computer Science | *Minor* in Cybersecurity *December 2024*

PROFESSIONAL EXPERIENCE

NVIDIA Capstone Project | Clemson, SC *August 2024 – December 2024*
Clemson University School of Computing Capstone Program (Product Developer)

- Leveraged NVIDIA's architecture for benchmarking **LLM/SLMs** with GPUs to perform computational tasks and for accuracy on fundamental tasks using NVIDIA's NeMo microservices
- Generated synthetic datasets **(NeMo Curator)** for training LLMs to follow safety rules **(NeMo Guardrails)** in responses, improving LLM alignment without sacrificing model capabilities
- Integrated guardrails into **Canvas LMS** application to enforce its virtual TA responsibilities, utilizing **AWS EC2** and **Docker** containers

Meaning Alignment Institute | Clemson, SC *August 2024 – December 2024*
AI Safety & Ethics Developer

- Developed evaluation metrics system using JSON and **Python (Pandas, NumPy, Scikit-learn)** to process and analyze **4,500+** ethically fraught AI interaction logs and consolidating **human values**, improving moral depth by **20-25%** using expanded ethical frameworks
- Implemented **machine learning pipeline for prompt engineering ethical reasoning**, improving contradiction handling **by 10-15%** through iterative prompt refinement using feedback loop mechanisms with API calls
- Assessed AI model outputs across 4 ethical frameworks **(utilitarianism, deontology, virtue ethics, social contract theory)**, increasing flawed reasoning detection success rate increased by 18%

Argonne National Laboratory | Lemont, IL *June 2024 – August 2024*
Automotive Security Research Intern

- Constructed & deployed ML models using **Python, TensorFlow**, and **Scikit-learn**, addressing vehicle performance for anomaly escalation under diverse operational stresses
- Engineered an automated anomaly escalation system, optimizing the detection of anomalies in vehicular sensor data reducing false positives by **20%** using VEINS simulation framework for robust and scalable security solutions
- Configured a real-time vehicle data stream via **HIL (Hardware-in-the-Loop)** on **Raspberry Pi,** allowing simultaneous reading and anomaly detection within CAVs

Principal Financial Group | Des Moines, IA
Information Security Engineer Intern *May 2023 – August 2023*

- Performed 50+ analytical anomaly reviews refining **OKRs & SOPs** for **insider risk detection**, reducing false positive alerts by designing better filters to reduce noise and improve relevance
- Devised a security analytics dashboard using **ElasticSearch**, enhancing log analysis and SIEM/SOAR exposure indicators for SOC design in establishing rules and policy use on data in SaaS application deployment
- Reduced noise in email traffic patterns and social media and cloud platform uploads utilizing **AWS services (S3, Lambda, CloudWatch, SNS Alerts)**, streamlining escalation workflows

Itron | West Union, SC
Manufacturing Test Engineer Co-op *August 2022 – May 2023*

- Modernized 6 web-based lookup and control tools from web-based interfaces to a **C# Windows desktop app with** CRUD operations, streamlining the user interface and architecture
- Refined manufacturing software **UX** by creating **test procedures & documentation,** increasing OEE by reducing defects and user errors
- Optimized **SQL** database performance by migrating from **MySQL to MS SQL**, supporting server decommissioning

Clemson Energy, Visualization & Analytics Center (CEVAC) | Clemson, SC
Software Engineer Intern *May 2022 – August 2022*

- Automated ingestion of **100M+ records** using Python scripts, reducing manual intervention in facility condition monitoring
- Deployed **full stack application** using **ASP .NET, C#, JavaScript, and MS SQL** relational database, optimizing **data processing efficiency** and **ETL** procedures
- Exercised Agile development principles to deploy **real-time sensor data visualization tools**, improving monitoring accuracy for **CO2, temperature, and humidity**

SKILLS

- **Languages**: Java, Python, C++, JavaScript, React.js, C, CSS, ASP.NET, .NET CORE, C#, and SQL
- **Backend:** Linux, Windows, AWS, PostgreSQL, MySQL, MS SQL, Django, and Express/Node.js
- **Technologies:** Trello, Jira, Docker, PowerBI, Kubernetes, Gitpod, Confluence, Swagger, Wireshark, Postman, Git, PyTorch, Pandas, NumPy, SciPy, Scikit Learn, Elasticsearch, and Splunk