

Devang Dhanuka

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EXPERIENCE

Graduate Research Assistant - AI in cybersecurity Rochester Institute of Technology — Advisor: Prof. Nidhi Rastogi	Oct 2024 – Dec 2025 <i>Rochester, NY</i>
<ul style="list-style-type: none">Developed an explainability framework on Temporal Graph Neural Networks (TGNN) using DARPA Trusted Computing datasets, improving transparency and trust of cybersecurity alerts.Implemented explainability methods (GraphMash, GNNExplainer & a proposed VA-TGExplainer), analyzing fidelity, stability, and accuracy, to generate reports and SOC dashboards (Streamlit), enhancing analyst decision-making.	
Senior Engineer - Cloud Infrastructure & Security Netwoven Inc.	Aug 2020 – Jun 2023 <i>Kolkata, India</i>

- Managed Azure cloud infrastructure** for enterprise deployments, implementing **governance frameworks** (resource tagging, cost allocation, budget alerts) and optimization strategies that improved billing accuracy and reduced cloud spend by 20-30% while maintaining performance.
- Led **Microsoft 365 tenant migrations** for **5,000+** users with 99.9% uptime, implementing enterprise security controls (**Information Protection, DLP, Intune MDM, Conditional Access, MFA**) to establish zero-trust security posture across global organizations.
- Developed **automation frameworks** using **PowerShell and Power Automate** that reduced manual operations by 40%, streamlining identity provisioning, license management, compliance reporting, and incident response workflows.
- Served as technical analyst for **Govern365** data governance platform, conducting **PoCs, production deployments, and client training** to automate compliance reporting and data classification across Microsoft 365 environments.

PROJECTS

Threat Synthesis (Multi-LLM Security Benchmark) <i>Python, LiteLLM, Vertex AI, Streamlit</i>	Sept 2025 – Dec 2025
<ul style="list-style-type: none">Built an evaluation framework benchmarking LLMs (Gemini, GPT, Llama) on 8 cybersecurity analysis tasks including MITRE ATT&CK mapping, IOC extraction, and CVSS scoring against ground truth datasets.Engineered a multi-stage pipeline with parallel inference, response normalization (majority voting, score averaging), and task-specific metrics (F1, MAE, Jaccard similarity) with Streamlit dashboard for visualization.	
Financial Management Hub (Serverless AWS App) <i>AWS, Terraform, Docker, CI/CD</i>	Feb 2025 – Apr 2025
<ul style="list-style-type: none">Developed a serverless financial tracking app using AWS Amplify, Lambda, and DynamoDB, integrated with Plaid/OpenAI APIs for automated expense insights, achieving 99.99% availability.Implemented auto-scaling infrastructure and CI/CD pipelines with Terraform, Docker, and GitHub Actions	
Travel Itinerary Planner with Google ADK Agents <i>Google ADK, Vertex AI, BigQuery</i>	May 2025 – Jun 2025
<ul style="list-style-type: none">Built a multi-agent planning system leveraging Google ADK; agents ranked attractions, ingested preferences, and generated optimized day-by-day travel itineraries.Applied agent orchestration, serverless architecture, and event-driven design to deliver a cost-efficient, scalable system.	

EDUCATION

MS Data Science Rochester Institute of Technology	Aug 2023 – Dec 2025 <i>Rochester, NY</i>
Bachelor of Computer Applications Amity University	Jul 2017 – Jun 2020 <i>Noida, India</i>

PUBLICATIONS

“Survey Perspective: The Role of Explainable AI in Threat Intelligence.” Nidhi Rastogi, Devang Dhanuka, <i>et al.</i> - Survey study on integrating XAI into SOC workflows.	
“Too Much to Trust? Measuring the Security and Cognitive Impacts of Explainability in AI-Driven SOCs.” Nidhi Rastogi, Devang Dhanuka, <i>et al.</i> - Evaluates explainability methods' effect on analyst trust and efficiency.	
“Impact of LLMs on Team Collaboration in Software Development.” Devang Dhanuka.	
“PROVEX: Enhancing SOC Analyst Trust with Explainable Provenance-Based IDS.” Devang Dhanuka, Nidhi Rastogi - XAI framework for temporal graph-based IDS with post-hoc explanations.	

TECHNICAL SKILLS

Programming & Scripting: Python, Java, PowerShell, React.js
ML & AI Frameworks: PyTorch, TensorFlow, LangGraph, Hugging Face, PyG, vLLM, FastAPI
Cloud & MLOps: AWS, GCP, Azure, Docker, Kubernetes (K8s), CI/CD, Terraform
Analytics & Visualization: Power BI, Streamlit, Pandas, SQL