# Dejaun Gayle

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#### **TECHNICAL SKILLS**

Proficient in: Java | Python | JavaScript | C# | HTML | CSS | Git | Flask | React | TensorFlow | Machine Learning | Adversarial Testing | Bash | SSL/TLS | Raspberry Pi

Familiar with: C++ | SQL | Node.js | UX/UI | Computer Vision | NLP | Azure AI | Pandas | NumPy

#### **EXPERIENCE**

#### **Junior System Administrator**

Kean IT - Union, NJ October 2023 - Present

- Implement and maintain enterprise-level IT systems and infrastructure, including setup, configuration, and maintenance of servers, networks, and associated components
- · Support routine system monitoring, performance optimization, and troubleshooting to ensure optimal functionality of university-wide IT systems
- Manage user accounts, permissions, and access control across various platforms and applications, enhancing system security and user experience

### **IT Helpdesk Analyst**

Kean IT - Union, NJ October 2023 - Present

- Provided Level 1 technical support to the university community via phone, email, and remote sessions, including diagnosing and documenting issues for escalation.
- Resolved over 300+ technical issues monthly, maintaining a resolution rate of 95%, significantly reducing system downtime and enhancing user productivity.
- Improved ticket response time by 30% through strategic process optimizations, ensuring swift and efficient support services.

#### **PROJECTS**

FutureForge Project Database (2024) - Link (React.js, Mantine UI, Raspberry Pi, Matplotlib, Apache, DuckDNS)

- Built FutureForge, a personal project database hosted on a Raspberry Pi, by implementing SSL encryption with Let's Encrypt, automating certificate renewals using Certbot and DuckDNS for dynamic DNS management.
- Configured Apache to handle HTTP and HTTPS requests, with automatic redirection to HTTPS, ensuring secure access to the database with continuous SSL verification through cron job scheduling and custom Bash scripts.

AdversaGuard: Image Attack Analysis and Defense (2024) - GitHub (Python, TensorFlow, Flask)

- Developed AdversaGuard, a tool utilizing Fast Gradient Sign Method (FGSM) for generating adversarial examples and implementing detection and reversion techniques to protect image classification models from adversarial attacks.
- Designed and deployed an interactive web interface for real-time adversarial image generation and detection, leveraging Flask, TensorFlow, and Bootstrap.

#### Multimodal Adversarial Testing Framework (2024) - GitHub (Lead Researcher/Developer)

- Conducted research on detecting and mitigating multimodal adversarial attacks on Large Language Models (LLMs), utilizing techniques like FGSM and PGD to generate adversarial examples and evaluate their impact on models such as ChatGPT and DALL-E.
- Developed strategies for enhancing AI model robustness, including adversarial training, defensive distillation, and ensemble methods, with findings presented in a research poster at the GMIS conference (2024).

#### Al-Language Models Resilience Testing with Adversarial Prompts (2023-2024) - Research Paper (Researcher/Co-Author)

- · Conducted a critical evaluation of AI models' resilience and cybersecurity, including ChatGPT-4, Bard, Claude, and Microsoft Copilot, using innovative adversarial prompts to test content moderation capabilities.
- Implemented the Response Quality Score (RQS) metric to quantitatively assess and enhance the accuracy and reliability of AI responses, fostering improvements in AI performance and user trust.

#### AdversaGuard: Image Attack Analysis and Defense (2022-2024) - GitHub (HTML5, CSS3, JavaScript, ¡Query, GSAP)

 Designed and developed a responsive personal portfolio website featuring dynamic project showcases, smooth animations, and customizable color themes using HTML5, CSS3, and JavaScript.

## HONORS, CERTIFICATIONS, & EXTRACURRICULAR

Research Program(s): CAHSI LREU - February 2024 | Garden State LSAMP - October 2023

Students Partnering with Faculty (SpF) - Summer 2024

Bootcamp(s): Al4ALL (Scholar) - January 2024

Organization(s): Center for Cybersecurity (Member) - March 2023

IAAMCS, Institute for African American Mentoring in Computing Sciences (Scholar) - August 2023

**Association for Computing Machinery** (Member) - October 2022

#### **EDUCATION**

Kean University - Union, NJ

**Expected Graduation Date:** May 2025

B.S. in Computer Science, Minor in Cybersecurity