

JAY KANIA

(609) 509-9264 | jaypkania@gmail.com | [linkedin.com/in/jay-kania-0x7](https://www.linkedin.com/in/jay-kania-0x7) | github.com/jpkOSTEP

EDUCATION

Rutgers University – New Brunswick

Master of Science, Computer Science

New Brunswick, NJ

Jan. 2022 – May 2024

Gujarat Technological University

Bachelor of Engineering, Computer Engineering (with distinction)

Gujarat, India

Aug. 2016 – Aug. 2020

EXPERIENCE

Rutgers University

Instructor

Aug. 2023 – May 2024

New Brunswick, NJ

- Instructed “Computer Architecture” to a diverse cohort of 550 students while pursuing a Master’s degree.
- Developed programming assignments and auto-grading scripts, ensuring 100% accuracy in evaluations.
- Hosted and managed high-availability server on the Rutgers iLabs cluster, providing 24/7 access to course material.
- Led and mentored a team of 6 course lecturers, improving instructional consistency and fostering a collaborative teaching environment.

Healthcare Technology Startup

Full-Stack Developer Intern

May 2023 – Aug. 2023

Somerville, NJ

- Designed and developed a full-stack Electronic Health Record (EHR) application with Angular and Node.js, maintaining HIPAA compliance and handling 1,500+ monthly users, reducing operational costs by \$60K/year.
- Built and optimized RESTful APIs, integrating Firebase for real-time data storage and Twilio for notifications.
- Implemented Identity & Access Management policies to enforce granular permissions & improve security compliance.
- Deployed serverless backend services using Google Cloud Run and Cloud Functions, enabling auto-scaling and reducing infrastructure overhead.
- Implemented scalable role-based access control (RBAC) and developed a disaster recovery strategy, reducing potential downtime risk by 90%.
- Architected a data ingestion pipeline on GCP (Cloud Pub/Sub) to enhance event data collection and monitoring.
- Utilized Docker for containerized deployments and Redis for caching, reducing query retrieval times by 50%.
- Enhanced UI/UX with PrimeNG components, improving accessibility and user experience for medical professionals.

Rutgers University

Part-time Lecturer (TA)

Sept. 2022 – May 2023

New Brunswick, NJ

- Provided extensive instruction and support for “Operating Systems Design” and “Computer Architecture” courses mentoring students in C programming, x86 Assembly, Memory Virtualization, and Thread Scheduling.
- Distinguished for preserving the highest standards of discretion, honesty, and exemplary job performance.

TECHNICAL SKILLS

Languages: JavaScript, TypeScript, Python, C, C++

Frontend: Angular, React, Next.js, TailwindCSS, Framer Motion, PrimeNG, RxJS

Backend & APIs: Node.js, Nest.js, Flask, RESTful APIs, GraphQL, Resend, Twilio

Database: SQL (PostgreSQL, MySQL), NoSQL (MongoDB, Firebase, Firestore, Redis)

Cloud & DevOps: GCP (Cloud Pub/Sub, Firestore), AWS (S3, Lambda, RDS, EC2), Vercel, Docker, Kubernetes, Nginx

Testing & Tools: Git, Jest, Jasmine, Postman, CI/CD (GitHub Actions, Jenkins), GDB

Security & Architecture: OAuth2, JWT Authentication, WebSockets, Microservices

PROJECTS

AWS Application | React Native, RESTful APIs, Python-Flask, AWS EC2, RDS (MySQL), Redshift

- Developed a cloud-native mobile application deployed on AWS EC2, integrating React Native with AWS Redshift and RDS (MySQL) for asynchronous query execution.
- Implemented secure RESTful APIs with Python-Flask, ensuring high-performance data access and processing.

Human vs AI Classification by Web Server Traffic Analysis | HTML, CSS, Python, Flask, Beautiful Soup

- Designed websites, web scrapers, and detection algorithms to distinguish between Human user and AI bots. Achieved up to 100% accuracy using a traffic classifier based solely on web server logs.