MANIKANDAN SUBRAMANI

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EDUCATION

Bachelor of Science (B.S.) – Computer Science

Minor in Cybersecurity · University of Rhode Island · US, Rhode Island, Kingston · 2026
- Awarded URI Presidential Scholarship
- Coursework: *Software Engineering, Secure Programming, Network & System Security, Data Structures & Algorithms, Cybersecurity Fundamentals*

SKILLS & CERTIFICATIONS

Programming Languages: C++, Python, JavaScript, Dart, HTML, CSS, PowerShell

Certifications: AWS Certified Cloud Practitioner (CCP)

Frameworks & Tools: PyTorch, Flask, Pandas, Docker, AWS, Flutter, Firebase (Auth, Firestore, Storage, Cloud Functions), Google Cloud Vision, MongoDB, Git/GitHub, Microsoft Azure, Google Cloud, OpenAI

Software Development: Agile (Scrum, Kanban), Version Control (Git), Secure Coding Practices, API Development, Cloud Computing

EXPERIENCE

Co-Author & Researcher

IEEE P2989 – Standard for Authentication in a Multi-server Environment   May 2024 – Present
- Analyze research papers on authentication schemes, presenting key insights weekly.
- Develop and test authentication protocols in C++.
- Design authentication protocols, define entities, and implement cryptographic mechanisms.
- Create UML diagrams for software design and adhere to secure software development lifecycle practices.

Endpoint Support Technician

University of Rhode Island   October 2024 – Present, Kingston, RI
- Diagnose and resolve software and hardware issues for end users varying in complexity.
- Ensure new and refurbished devices comply with university IT policies.
- Provide customer service while supporting service desk operations.
- Perform drive formatting, software installation, verification, and virus removal.
- Collaborate with ITS Security on endpoint management and cross-departmental support.

Software Developer & Sound Designer

Suvy Classes   June 2023 – August 2023
- Developed the Suvy website (suvyclasses.com) using React JS in collaboration with senior developers.
- Built a virtual classroom Android app with React Native.
- Improved app performance by 50% and deployed MongoDB clusters for student data management.
- Co-developed an AI tutor chatbot using OpenAI prompt engineering.
- Designed sound effects and music for the Suvy app with FL Studio.

Research Intern

Mohammed Bin Rashid School of Government   July 2024 – December 2024
- Conduct extensive research on global public sector innovations, focusing on cybersecurity, artificial intelligence, digital governance, sustainability, and conservation.
- Collaborate with senior researchers to transform case studies into comprehensive research papers, to be presented at international conferences

PROJECTS

RhythmEDU – AI based music generation app

HackMIT 2024 · ballot.hackmit.org/project/kjphk-tgxha-utpxl-lojiw
- Developed a full-stack web app that generates songs from lecture notes and slides, automating text extraction and music production.
- Implemented Google Vision OCR for handwritten text extraction and integrated OpenAI for grammatical correction.
- Engineered Llama for precise text summarization and used SunoAI to generate vocals and instrumentals.
- Led API integration and front-end development with a team of 3, optimizing user experience with ReactJS and Figma.

Step Bet – Fitness and Casino Rewards App

University of Rhode Island · github.com/Jpiccoli1691/305FitnessCasino
- Built the front end using Flutter/Dart and designed UI/UX with Figma, integrating Firebase backend services for authentication, Firestore database, cloud storage, and analytics.
- Managed the project with SCRUM Agile methodology, utilizing GitHub Project for kanban-based task management and maintaining three-tier version control (Development, Staging, Production).
- Conducted comprehensive manual and automated testing across multiple devices using emulators and Firebase Robo Test to ensure app stability and performance.
- Launched the app Beta on Google Play, collected key user metrics (Daily Active Users, Retention, Net Promoter Score), and optimized the app based on user feedback and analytics.

INVOLVEMENT

Startup Lead

University of Rhode Island · RISE- UP Ideation Studio · February 2025 – Present
- Conducted customer discovery and market research to validate demand for a textbook and course material trading platform.
- Developed a Business Model Canvas (BMC) and iterated using Lean Startup principles.
- Designed, tested, and gathered user feedback on a Minimum Viable Product (MVP).
- Collaborated with mentors and team members to strategize and develop a scalable marketplace model.

Hacker

Cyber Club · September 2024 – Present
- Participating in weekly meetings and workshops on cybersecurity tools & concepts, and cybersecurity competitions