AKHIL JACOB

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EDUCATION

Rensselaer Polytechnic Institute / *Troy, New York*   August 2016 - May 2019
- Bachelor of Science in Computer Engineering
- Coursework: Algorithmic Robotics, Embedded Control, Operating Systems, Applied Parallel Computing, Computer Architecture, InterNetworking of Things (IOT)

WORK HISTORY

Modrn Magic LLC / Founder & Lead Developer (https://modrnmagic.app/)   June 2023 - Present
- Crafting an eclectic portfolio of innovative mobile apps focused on design and functionality
- Nookly: Built an Uber-style home services app in Flutter and Firebase, enabling users to schedule and manage home services efficiently
- Flowomoro: Designed and developed a minimalist Pomodoro productivity app, showcasing strong UI/UX skills and design sensibilities
- HypeBridge: Created an AI-powered influencer search tool for marketing agencies, allowing micro/macro/niche influencer discovery and outreach
- Skywise: Developed a conversational AI weather app integrated with an LLM for real-time, interactive weather updates and forecasts
- Astro Defender: An asteroid defense game to enhance mobile app development skills and explore game development

Software Engineer II, Identified Data / Datavant / *Remote*   March 2022 - May 2023
- Led the design and development of a custom authentication system using Kotlin and Rego, implementing OAuth2 and OpenID Connect for secure user authentication and authorization, enhancing security across all applications and APIs
- Built and optimized a Python-based healthcare data worker with retry logic and failure prevention, boosting data retrieval efficiency and reliability
- Led the implementation of an automated data retrieval system, replacing a manual process that took days with a faster, configurable solution that completed in minutes

Software Engineer, Azure Identity / Microsoft / Seattle, Washington   August 2019 - February 2022
- Led development of an automated config deployment platform in C#, reducing deployment time and ensured smooth migration with custom tools
- Enhanced identity management tooling for Azure Active Directory by implementing new API (C#) and UI (JavaScript/Knockout/CsHtml) features for first-party applications, improving user experience and system functionality
- Led development of an automated deployment platform in C#, reducing deployment time by 40% and ensuring smooth migration with custom tools

Software Engineering Intern / Bank of America / *Jersey City, New Jersey*   June 2018 - August 2018
- Developed a Scala application to ingest JavaScript errors and contextual information, enabling developers to diagnose and resolve issues

Full-Stack Developer / Co-Founder / Our.News / *Troy, New York*   April 2018 - July 2018

- Redesigned user experience and upgraded site capabilities using Python, PHP, SQL, JavaScript, and jQuery, increasing user engagement
- Boosted team productivity by implementing GitFlow processes, code reviews, quality guidelines, workflow management, and automated issue tracking
- Created portable web components using Stencil.js for partner companies, expanding product integration and market reach

Software Engineering Intern / The MITRE Corporation / *Bedford, Massachusetts*   June 2017 - August 2017

- Developed a JavaFX application to sanitize classified documents and generate output files in various formats (PDF, text, Word), streamlining document processing
- Practiced Agile and Scrum in 2-week sprints with 3 other developers
- Saved Air Force personnel 7 hours per week by automating manual document sanitization processes
- Collaborated with users to resolve issues and enhance application features, improving user satisfaction
- Presented project outcomes to senior military officials and MITRE leadership, showcasing application benefits

PROJECTS

- **IoT Home Automation Platform:** IoT Home Automation Platform: Developed a distributed system in Golang for IoT device automation, enabling centralized control and improving home automation
- **Automated Quadcopter Flight:** Implemented object tracking and automated flight patterns using Python, OpenCV, and Raspberry Pi; utilized PID control for automation
- **Antimoz:** Created a web analytics tool using Divolte Collector for user event collection, Kafka for event storage, and Docker for deployment
- **FIRST Robotics:** Developed and tested software for robotics, enhancing robot capabilities using computer vision, PID control, and multi-threading

SKILLS

- **Languages:** Java, C++, Python, C, C#, JavaScript, Shell scripts (Linux/Unix), Android development, GoLang
- **Libraries:** Vue.js, React.js, Flutter
- Agile Methodologies
- Test-driven development

- **Tools:** Git, Nginx, Atlassian Suite (JIRA, Confluence, Bitbucket), LTspice, CAD, Docker, ROS, Azure DevOps
- **Database:** MySQL, Postgres, Azure DocDB
- Linux server management
- Project planning & management