# AARON ZACHARIAH

# SOFTWARE ENGINEER • FULL-STACK SOFTWARE DEVELOPER

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----- PROFESSIONAL SUMMARY-----

Full-stack software developer with a Master's in Computer Science from Rensselaer Polytechnic Institute. Skilled in AWS, .NET, Vue.js, and machine learning frameworks. Experienced in agile development, feature implementation, and debugging complex systems. Adept at delivering scalable solutions and collaborating with cross-functional teams to meet business objectives.

----- AREAS OF EXPERTISE -----

PROFESSIONAL SKILLS Agile Methodologies | Cross-Functional Collaboration | Critical Thinking | Adaptability | Analytical Skills |

Time Management | Project Management | Communication Skills

TECHNICAL SKILLS Programming Languages: Java, Python, JavaScript, TypeScript, C/C++| Frameworks: React, Vue.js, Spring

Boot | Cloud Platforms: AWS, Firebase | Tools: Docker, Git | Data Science/AI: TensorFlow, PyTorch, Pandas, NumPy | Databases: MongoDB | Operating Systems: Linux, Windows | Testing Tools: Selenium, Junit | CI/CD

Pipelines | API Development

----- PROFESSIONAL EXPERIENCE -----

### IPVideo Corporation - A Motorola Solutions Company | Bay Shore, NY

Jan 2023 - Present

Software Engineer

Contributed to the development and enhancement of cutting-edge software solutions for security and cloud-based applications. Engaged in full-stack development, troubleshooting, and integrating cloud services to optimize performance and user experience.

- Facilitated the development of new features, testing, and bug fixes using .NET Maui for cross-platform mobile app frameworks.
- Engineered the halo support portal through the application of Vue.js/Quasar and TypeScript. Fixed support issues by feature testing and implementing bug fixes.
- Integrated AWS Cognito for user authentication and implemented AWS Lambda for user migration, along with Python scripting on Cognito User Pools to automate user pool management.

# RevSavvy | Dover, DE

June 2023 - August 2023

Full Stack Software Developer Intern

Participated in designing and implementing robust backend services and user-facing features for the RevSavvy platform. Collaborated in an agile team environment to ensure high-quality deliverables while improving testing frameworks and reducing software defects.

- Designed and developed backend services using Java Spring Boot and Spring WebFlux, including efficient database queries.
- Streamlined automated testing frameworks with Selenium, leading to a measurable reduction in software defects.
- Implemented user interface features for the RevSavvy platform using React/Redux, fixing bugs and delivering enhanced functionality.

----- EDUCATION -----

Rensselaer Polytechnic Institute, Troy, NY

**Master of Science:** Computer Science, December 2024, Summa cum laude GPA: 3.85 **Bachelor of Science:** Computer Science, December 2023 | Minor: Economics GPA: 3.73

----- KEY PROJECTS -----

NBA-Regression-Analysis, Machine Learning Project, RPI | Fall Semester 2024 | <a href="https://github.com/zachaa2/NBA-Regression-Analysis">https://github.com/zachaa2/NBA-Regression-Analysis</a>
Conducted NBA regression analysis on win percentages using curated Basketball-Reference data. Applied normalization and multiple regression models (OLS, SVR, Random Forest) to predict final standings and evaluate model performance:

### Robustness of Synthetic Graph Generators under the Adversarial Setting, RPI Master's Project | Jan 2024 - Dec 2024

Conducted an empirical analysis of the robustness of deep synthetic graph generators when trained on adversarially perturbed data. Found and implemented state of the art graph poisoning attacks and graph generators and developed an experimental pipeline to evaluate the results.

DP-BBVFL, AI and Blockchain Project, RPI | Sep 2023 - Dec 2023 | Paper: https://arxiv.org/abs/2407.07054

Created a VFL model while integrating blockchain for decentralized algorithm aggregation and applying Differential Privacy mechanism on embeddings for a more novel application.