

Taylor Headen

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EDUCATION

North Carolina A&T State University – Greensboro, NC	May 2023
Master of Science in Computer Science	
University of North Carolina at Greensboro – Greensboro, NC	August 2020
Bachelor of Science in Mathematics	

RELEVANT COURSEWORK

Data Structures & Algorithms, Data Analytics, Database Management, Data Mining, Software Engineering, Specifications and Design, Data Warehousing, Linear Algebra, Probability & Statistics, Calculus, Discrete Math, Mathematical Analysis

SKILLS & CERTIFICATIONS

Programming Languages: Python, SQL, LaTeX, Java, HTML, CSS, JavaScript

Technologies: MySQL, SSMS, AWS RDS, PostgreSQL, Microsoft Office, PowerBI, Excel, Dash, GitHub

EXPERIENCE

North Carolina A&T State – Software Developer Research Associate Remote	Present
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- Built data pipelines and automation processes to efficiently migrate and manage data in AWS RDS.
- Collaborated with industry partners, NCA&T faculty and students to develop a decision support tool for a hunger relief non-profit organization.
- Authored specification documents, documented software processes, and code to promote knowledge sharing within a diverse team.
- Conducted research on humanitarian relief operations, smart systems, analytics and optimizations to support project objectives.

Miami Heat - Data Analytics Intern Miami, FL	June 2023 – August 2023
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- Collaborated with Revenue Strategy and Analytics team to mitigate errors and inconsistencies in ticketing reports for Miami HEAT and 601 Analytics clients.
- Reviewed SQL queries and documented report logic for improved data accuracy
- Conducted product mapping and classification to ensure precise categorization and organization of products within the company's data warehouse.

North Carolina A&T State – Graduate Research Assistant Greensboro, NC	August 2022 – May 2023
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- Conducted in-depth research on emerging technologies and methodologies in the field of recommendation engines and web-based visualization tools.
- Conducted thorough code reviews to understand back-end logic, identify and mitigate bugs, and enhance code quality and readability.
- Created an interactive dashboard using Python's Dash framework as the front-end interface intended for a Tool for Recommending Attack Patterns (TRAP), leading to improved decision-making for cybersecurity strategies.
- Co-authored a paper titled "Jairen Gilmore, Uriah Moore, Xiaohong Yuan, Taylor Headen, Mounika Vanamala. Visualization Dashboard for Recommending Attack Patterns Using Topic Modeling", 12th International Conference on Software and Information Engineering (ICSIE 2023).

Corning Inc. - Data Engineer Intern Corning, NY	May 2022 – August 2022
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- Leveraged DataOps practices automating data pipelines, ensuring real-time accuracy and reliability of data streams.
- Implemented an ETL framework to extract valuable information from disparate sources enabling data consolidation and analysis for actionable insights.
- Integrated manufacturing data architectures by connecting Programmable Logic Controllers (PLCs) with industrial application layer protocols (MQTT) for seamless data communication.
- Developed a Python GUI to streamline entry processes into a Message Queuing Telemetry Transport broker.