Throughout the course of my carrier having work in different sectors in different roles, it was a fulfilling journey in the world if information technology and even until my current role where I currently serve as a Support Escalation Engineer at a leading software development company headquartered in Redmond, Washington. My professional expertise lies in Azure Infrastructure-as-a-Service (IaaS), with a focus on compute and storage solutions. In this role, I resolve complex technical issues, collaborate across departments, and ensure mission-critical workloads remain reliable, secure, and optimized.

My current roles within my organization put me in line to work with different vendors and in particular cross team to ensure every organization is empowered to do more.

While I have hands on experience in Azure Infrastructure-as-a-Service (IaaS), I did struggle with coding as I do not have any exposure or experience in coding, while the MISCBA program have really provide me with more confident in Python, going forward, I will be learning more to become experience in the world of software systems and Engineering.

The RexUS capstone project-Real Estate eXploration and Unified Synthesis embody the integration of computing and business disciplines by addressing market opacity and valuation uncertainty in the real estate sector. RexUS is a web-based platform that leverages predictive analytics to forecast property sale prices and market trends. This project demonstrates the synthesis of Software Systems (SS), Business Analytics (BA), Data Management (DM), and Cybersecurity and Networking (CN). In addition, my portfolio projects, including the CityMD Urgent Care Database System, provide further evidence of my ability to apply these foundational qualities across diverse domains.

Software Systems (SS)

Software Systems represent architectural integrity and functional implementation. They emphasize modularity, scalability, and maintainability, ensuring that systems deliver consistent value.

Putting in consideration the Software Systems principles, I need to first have a good understanding of the problem and issue and the function/goal of the application, next steps will be to have a good architecture.

Application in RexUS uses the Django-based web application which embodies SS principles by providing a secure, scalable platform for predictive analytics. Containerization with Docker ensures reproducible deployments. My coursework in CIDM 6325 (Software Systems) emphasized modular design, separation of concerns, and architectural integrity. Assignments in this course CIDM 6330 and CIDM 6325 required me to analyze system architectures and apply design principles to ensure maintainability and scalability, which directly informed RexUS's backend design and deployment strategy.

Business Analytics (BA)

Business Analytics transforms raw data into actionable insights through descriptive, diagnostic, predictive, and prescriptive methods.

Application in RexUS: Regression models and dashboards provide analysts with forward-looking property valuations and market trends. Similarly, in the CityMD Urgent Care Database System project, I applied BA principles to analyze patient visit patterns, resource utilization, and operational efficiency. This project demonstrated how predictive analytics can optimize staffing and improve patient throughput, paralleling RexUS's goal of forecasting real estate trends.

Data Management (DM)

Data Management encompasses governance, storage, and retrieval efficiency. It ensures that data is accurate, consistent, and scalable.

Application in RexUS: PostgreSQL schema design and ETL pipelines harmonize disparate real estate datasets into a unified repository. My CityMD Urgent Care Database System project IN CIDM 6350 further illustrates Data Management principles, where I designed relational schemas to manage patient records, appointment scheduling, and billing data. This project emphasized referential integrity and scalability, aligning with RexUS's requirement to integrate multiple external datasets.

Cybersecurity and Networking (CN)

Cybersecurity and Networking safeguard confidentiality, integrity, and availability (CIA) of systems and data.

Application in RexUS: Secure authentication, HTTPS/TLS enforcement, and role-based access control ensure predictive insights are delivered with integrity. My coursework in CIDM-6340, particularly the ransomware recovery plan assignment, emphasized resilience planning and proactive defense. These lessons informed RexUS's security architecture, ensuring protection against evolving threats.

The RexUS project demonstrates the cyclical interconnection of curriculum areas:

1. Data Management > Software Systems: Here the structured databases provide the foundation for Django's application logic.

2. Software Systems >Business Analytics: The application RexUS executes predictive models and presents insights through dashboards.

3. Business Analytics > Data Management: Analytical outputs enrich the dataset, creating feedback loops for improved predictions.

4. Cybersecurity and Networking >All Areas: Cybersecurity and Networking overlays every stage, ensuring secure ingestion, computation, and delivery of insights.

This interconnected process mirrors my professional role in Azure IaaS, where secure infrastructure supports reliable systems, enabling analytics based on structured telemetry.

The RexUS capstone project represents the final stage of my learning journey, as documented in my portfolio below:

-CIDM 6325 and CIDM 6303 (Software Systems): Applied modular design and architectural principles to ensure scalability and maintainability.

-Ransomware Recovery Plan (CN) IN CIDM 6340 and CIDM 6341: Developed a business continuity framework for cyber resilience.

- CityMD Urgent Care Database System (DM/BA) PROJECT in CIDM 6350: Designed relational schemas and applied analytics to optimize patient care and resource allocation.

- Log Aggregation and Monitoring Project (DM/SS): Built ETL pipelines for structured log storage, enabling faster troubleshooting.

- Resource Optimization Project (BA/DM): Applied predictive analytics to workload telemetry, guiding infrastructure scaling decisions.

- Secure Deployment Architecture Project (SS/CN): Implemented containerized services with role-based access, ensuring resilience and compliance.

These projects collectively demonstrate my ability to synthesize program foundations into practical solutions. RexUS extends this synthesis into the real estate domain, while the CityMD project illustrates its applicability in healthcare, proving that foundational qualities are transferable across industries.

The RexUS capstone project indeed constitutes a good synthetic understanding of the MS-CISBA programs foundational. By defining Software Systems, Business Analytics, Data Management, and Cybersecurity and Networking in my own terms, and by illustrating their interconnection, the project demonstrates how academic principles translate into practical, industry-aligned solutions.

My professional role in Azure IaaS has reinforced this synthesis, while the evolutions portfolio including the CityMD Urgent Care Database System substantiates the iterative development of these skills. RexUS is therefore not only a capstone project but a reflection of my ability to integrate technical depth with business insight, delivering secure, data-driven solutions to complex challenges across multiple domains.