

Bradley Chippi

Lead Software Developer / Solution Manager at Dow
Bay City, MI,

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SUMMARY

Experienced software development leader with a Master's in Computer Science and a track record of managing high-performing teams. Adjunct professor at SVSU, Microsoft-certified Azure Developer Associate, and Azure DevOps Expert. Recognized as a top-performing employee at Dow, delivering innovative, scalable solutions and mentoring teams to success. To see my latest projects, please visit my GitHub: github.com/bchipp and my blog: webenclave.com.

SKILLS

Programming Languages

C#, TypeScript, Python, PowerShell

Libraries and Frameworks

ASP.NET, Angular, Blazor, Next.js

Compute Services

Azure PaaS Services, Firebase, n8n

Relational Databases

Azure SQL, MySQL, Postgresql, Cloudflare D1

NoSQL Databases

MongoDB, CosmosDB, Neo4j, Couchbase

Vector Databases

ChromaDB, Weaviate

Storage Services

Azure Storage, MinIO, Cloudflare R2

In-memory Data Platform

Redis, Dragonfly

Security and Identity

Azure KeyVault, Azure PIM, Azure AD, Firebase Auth, Keycloak

Real-time Communication

Azure SignalR, Azure Service Bus, Azure Web PubSub, Apache Kafka, Colyseus.js

Analytics and Monitoring

Azure App Insights, Azure Log Analytics, UptimeKuma

Data Engineering

Azure Data Factory, Azure Synapse, Azure Databricks

Search

Azure Search, MeiliSearch

Containerization

Docker, Kubernetes

Soft Skills

Leadership, Management, Critical Thinking

WORK EXPERIENCE

Jan 2025 - Current

Lead Software Developer / Solution Manager at Dow Chemical

📍 Midland, MI

- Led the development of cloud-native, scalable solutions.
- Collaborated with Integrated Supply Chain (ISC) data scientists and stakeholders to design, develop, implement, and support innovative solutions.
- Practiced and mentored Agile Scrum methodology and strategy.
- Mentored less experienced developers and collaborated with senior developers.
- Delivered technology demonstrations and participated in design thinking workshops and event storming sessions.
- Defined the scope and solution architecture of products with the Senior Advisory Developer.
- Ensured successful execution of iterations by identifying and mitigating risks, assisting in recovery of delayed stories, and eliminating knowledge gaps.
- Communicated and clarified client specifications to developers.
- Wrote maintainable, reliable, efficient, and tested code; reviewed and upheld the quality of the development team's source code.
- Developed and implemented necessary data flows for complex data sources and integrations.

- Implemented top-tier security and data protection measures.
- Partnered with external vendors and academic institutions to design and build solutions.
- Developed and implemented microservices powering Dow's machine learning use cases.
- Built reusable code and libraries for future use across Dow.
- Contributed to and enforced software best practices.
- Ensured technical feasibility of acceptance criteria and user stories with the Product Manager.
- Guided the adoption of cloud technologies integrating with legacy systems.
- Facilitated cross-team collaboration through knowledge sharing, architectural and design reviews, and code reuse.

Jan 2025 - Current

Adjunct Faculty - Computer Science and Information Systems at Saginaw Valley State University
 📍 **University Center, MI**

- Teaching a graduate course in Python programming for the Master of Science in CSIS program.
- Designing and delivering course materials focused on Python application programming, data organization, and mathematical operations.
- Utilizing advanced object-oriented programming features and tools such as NumPy.
- Engaging students in hands-on learning experiences and practical applications of Python programming.
- Collaborating with faculty and staff to enhance the curriculum and support student success.
- Contributing to the university's commitment to undergraduate teaching, learning, and community-based research.

Jan 2021 - Jan 2024

Associate Solution Manager at Dow Chemical
 📍 **Midland, MI**

- Work with Senior Solution Manager and Solution Managers to define the scope and solution architecture of products.
- Lead the development and support of Web/Mobile solutions.
- Mentor and coach junior developers on the team.
- Conduct regular code reviews and provide guidance on best practices in software and data engineering.
- Understand complex data sources and integrations and develop/implement necessary data flows.
- Implement top-tier security and data protection.
- Develop and optimize ETL processes using Azure Data Factory, SAP BODs, and Event Driven Architecture.
- Performance - Defines controls, measures and KPIs for solution performance and reliability.
- Develop and implement a robust set of services and APIs that power application(s).
- Build reusable code and libraries for future use and sharing across Dow.
- Contribute to the development best practices for the Manufacturing Operations and Dow.
- Help shape and guide the adoption of cloud technologies that integrate or interface with legacy systems.
- Gather requirements and write acceptance criteria and user stories with the customers / product owners collaboratively as part of a team.
- Partner with external vendors and academic institutions to collaboratively design and/or build the best solutions.
- Build and foster relationships to drive integration and cross-team decisions.

Jan 2019 - Jan 2021

Software / DevSecOps Engineer at Dow Chemical's R&D
 📍 **Midland, MI**

- Develop software solutions that support Dow's material businesses.
- Analyze user requirements and create functional specifications.
- Debug and troubleshoot issues in team's app portfolio.
- Perform code reviews and provide feedback to improve code quality.
- Document software design, implementation, and testing procedures.

- Scan and re-mediate code repositories with static application security testing tools.
- Integrate security practices into the development and deployment of team's applications.
- Train and educate team members on security best practices.
- Lead / support Dow's cloud native initiative for modern software engineering.

Jan 2018 - Jan 2019

Cyber Security Operations Automation Specialist at Dow Chemical

📍 **Midland, MI**

- Deploy a solution to track the progress of security incidents from analysis to recovery.
- Build a process where the Security Operations Center can dynamically create use cases.
- Lead the direction towards DevSecOps for modern software engineering at the company.
- Develop and implement automation solutions to enhance the efficiency and effectiveness of cyber security operations.
- Design and deploy automated workflows for detecting, analyzing, and responding to security incidents and threats.
- Create custom scripts and automation playbooks to streamline repetitive security tasks, such as threat intelligence gathering, incident response, and vulnerability management.
- Work closely with security analysts, engineers, and other stakeholders to identify opportunities for process improvement and automation.
- Evaluate and select appropriate automation technologies and tools based on security requirements and operational needs.
- Develop custom solutions for ServiceNow's Security Operations modules.
- Develop and deploy group based privileged identity management.

Jan 2017 - Jan 2017

Cyber Security Intern at Dow Chemical

📍 **Midland, MI**

- Build threat prevention and network health dashboards with Pygal and Power BI.
- Create a web application that manages black/white listing for the company's corporate firewalls.
- Setup Juniper firewall development lab, configured policy groups and threat prevention policies.
- Setup logging, SSL Inspection, and connected to advanced threat prevention feeds.
- Automated tracking of potential cyber security threats on social media using bots.

Jan 2014 - Jan 2018

Systems Developer at Dow Chemical

📍 **Midland, MI**

- Manage custom scripts for extensibility of Microsoft SharePoint sites using JavaScript.
- Create autonomous scripts to ease and eliminate workloads using PowerShell.
- Design data visualizations that showcased Dow manufacturing using company BI tool.

EDUCATION

2018 - 2019

MS Computer Science and Information Systems at Saginaw Valley State University

2014 - 2018

BS Computer Science at Saginaw Valley State University

AWARDS

2023

1st Place Audiocraft Hackathon at Lablab.Ai

2023

3rd Place Autonomous Agents Hackathon at Lablab.Ai

2019

Best Use of DevOps at GrizzHacks 4

2018

CERTIFICATES

Nov 2021

Azure DevOps Expert

Microsoft

Nov 2020

Azure Developer Associate

Microsoft

Aug 2024

Perform Data Science with Azure Databricks

Microsoft

Apr 2024

Fundamentals of Reinforcement Learning

University of Alberta
