Meet Dr. Gaiye Zhou, or Gail for short! She's been with Microsoft for over 7 years, invented and published automated processes that helped many customers migrate data warehouses into Azure Synapse. She has partnered with the Early Access Engineering Team developing solution accelerators to accelerate customers’ business innovation. She is experienced with C, C++, Java, C#, Python, SQL, PowerShell, Bicep, and Terraform. She's an inventor with two awarded patents.

Gail's philosophy for work is to keep innovating and delivering well documented, secure, simple, scalable, and extensible solutions. She's excited about the current breakthrough in AI that offers enormous business opportunities for customers.

Before joining Microsoft, Gail held leadership roles such as Chief Architect at NTT Data, Director of Business Architecture at Bank of America, Director of Enterprise Information Architecture at Fiserv. Her contributions included defining architecture strategy and leading initiatives that created new business solutions with new technology and optimized footprints.

Dr. Gaiye Zhou holds a PhD in Electrical and Computer Engineering from the University of Tennessee. Her PhD dissertation created three methods to automatically design a PID controller using Machine Learning, Simulated Annealing, and Fuzzy Logic.

Gail enjoys gardening, hiking, and long walks while listening to podcasts.

**Pioneered AI/ML application in Process Control**

[PID autotuner design using machine learning | IEEE Conference Publication | IEEE Xplore](https://ieeexplore.ieee.org/document/274411), [Automation of PID Autotuner Design for Complex Systems - ScienceDirect](https://www.sciencedirect.com/science/article/pii/S1474667017586681),

[Fuzzy logic-based PID autotuner design using simulated annealing | IEEE Conference Publication | IEEE Xplore](https://ieeexplore.ieee.org/abstract/document/288947)

**Contributions to GitHub IP/Repositories and YouTube Videos**

[AzureDWScriptsandUtilities/APS to SQL DW Migration - Schema and Data Migration with PolyBase at master · microsoft/AzureDWScriptsandUtilities (github.com)](https://github.com/microsoft/AzureDWScriptsandUtilities/tree/master/APS%20to%20SQL%20DW%20Migration%20-%20Schema%20and%20Data%20Migration%20with%20PolyBase),

[microsoft/AzureSynapseScriptsAndAccelerators (github.com)](https://github.com/microsoft/AzureSynapseScriptsAndAccelerators),

[AzureSynapseScriptsAndAccelerators/Migration/SQLServer at main · microsoft/AzureSynapseScriptsAndAccelerators · GitHub](https://github.com/microsoft/AzureSynapseScriptsAndAccelerators/tree/main/Migration/SQLServer),

[Migrate SQL Server to Azure Synapse Analytics - YouTube](https://www.youtube.com/playlist?list=PLTPqkIPx9Hx8QJnYh45aewA_60Kw3x1Ia),

[Automate PDF forms processing - Azure Architecture Center | Microsoft Learn](https://learn.microsoft.com/en-us/azure/architecture/ai-ml/architecture/automate-pdf-forms-processing),

[GitHub - microsoft/Azure-PDF-Form-Processing-Automation-Solution-Accelerator](https://github.com/microsoft/Azure-PDF-Form-Processing-Automation-Solution-Accelerator),

[GitHub - microsoft/Intelligent-Field-Service-Solution-Accelerator](https://github.com/microsoft/Intelligent-Field-Service-Solution-Accelerator),

[GitHub - microsoft/Azure-Invoice-Process-Automation-Solution-Accelerator](https://github.com/microsoft/Azure-Invoice-Process-Automation-Solution-Accelerator)