

Xiangyu (Shawn) Xiao

shawnxxy@me.com

17317158354

GitHub: <https://github.com/ShawnXxy>

Qualifications and Capabilities

- ✓ Programming Languages used: **C#, Python, Java, PHP, HTML/CSS**, and **JavaScript**;
- ✓ Database experienced: relational databases (**MySQL/PostgreSQL**);
- ✓ Tools and platform experienced: Azure,
- ✓ Topic familiar with: Cloud Compute, High Availability, LLM.

Related Work Experience

Microsoft | Shanghai, China

July 2018 – present

Sr. Escalation Engineer (FTE)

July 2024 – present

- Developed troubleshooting dashboard using Azure Data Explorer to visually display critical log messages, timelined metrics trend, and all needed information that can be used to quickly define, locate, narrow down the MySQL issue along with mitigation steps and TSG/Wiki links in case of need to proceed further.
- Developed AI-based tool, named *OrcasCopilot*, to automatically answer questions posted in Teams Supportability Channel using existing TSGs/Wiki and resolved incidents. The tool will
 - Leverage Azure OpenAI text-embedding model to automatically (using Azure Machine Learning pipeline) vectorize internal TSGs/Wikis (markdown files) on Azure DevOps and internal incident ticket (bug report) data stored on Azure Cosmos DB (NoSQL) , and save vectorized data in Azure Blob.
 - Using Azure Search Service (Cognitive Search) to fetch vectorized data from Azure Blob
 - Setup Promptflow to handle front-end user request and return GPT-4o summarized answers based on information retrieved from Azure Search.
- Contributed as a **committer** to the open-source Azure Powershell *Az.MySql* and *Az.Postgres* module
- Top performer (10%)

Support Escalation Engineer (FTE)

November 2020 – June 2024

- Awarded as **Azure Database for MySQL - Emerald Contributor** for:
 - Host and participated weekly triage to diagnostic complex MySQL issue reported globally.
 - Manage internal Supportability Channel on Teams to swarm with 700+ active internal engineers and partners on complex MySQL issues (Average 10 threads posted on daily basis).
- Maintained and contributed official public document for Azure DB MySQL
- Handled escalating requests for issue troubleshooting and official RCA draft for external users.
- Designed escalating and RCA request workflow to maintain healthy support ticket backlog.
 - Aged backlog ($\geq 30d$) was driven down from 18 to 0 in GCR region within 6 months.
 - First-Day-Resolution was met at 80% in APAC region.
 - MySQL RCA delivered within 3 business days (was 7+ business days)
- Developed Teams Chatbot, *CasePokemon*, for internal use to monitor support tickets status on Teams to help internal users understand the most recent case state at soonest. With the support ticket number, the bot will
 - Return adaptive card showing support ticket status including issue description and support engineer owner contact
 - Summarize case history and troubleshooting suggestion leveraging Azure OpenAI.
- Developed a tool to emit MySQL status/metrics into Azure Log Analytics Workspace to help *Azure DB for MySQL Single Server* users monitor MySQL running state. [ShawnXxy/AzMy-Metrics-Bin: Ingest information_schema Metrics into the Azure Monitor Log Analytics Workspace](#)
- Developed a tool to test connectivity for *Azure DB for MySQL Single Server* users to quickly diagnostic and narrow down connectivity issue. [ShawnXxy/AzMySQL-Connectivity-Checker: This PowerShell script will run some connectivity checks from this machine to the Azure MySQL PaaS](#)
- Top performer (10%)

Technical Support Engineer (FTE)*September 2019 – October 2020*

- Served as the ONLY SME (Subject Matter Expert) in MySQL topic in APAC region (with 7 members in GCR, 11 in APJ, and 13 in IST).
- **CSS Team Impact Award** Winner for :
 - Conducted series of internal documents, TSGs, wikis, etc. and created advanced online technical content including Knowledge Base articles, training documents, blogs, etc. to help new members quickly onboard MySQL tech stack and join delivery
 - Presented technical content to various audiences including partners, and internal stakeholders to help understand healthy status of global support tickets and the workflow how to proceed a support request at different stage.
- Top performer (10%)

Technical Support Engineer (Contract)*July 2018 – September 2019*

- Developed specialized expertise and solved complex technical issues in Microsoft Azure DB for MySQL and PostgreSQL (PaaS).
- Used tools for debugging and root cause analysis. Reported product bugs and be an advocate for product improvement using customer suggestions.
- Engaged and collaborated with other Microsoft groups, including escalation teams and the development team, in gaining resolution to critical, complex issues.
- Participate in planned team-wide shift rotations to cover business needs, including 24x7 “On-Call” responsibilities and extended (morning/evening/weekend shift).
- Top performer (10%)

Education

Fort Hays State University | *Hays, KS, US***Master of Professional Study – Web Development***August 2016 – May 2018*

- GPA 3.8 / 4.0
- Served as Graduate Teaching Assistance to tutor Information System 101, Fundamental of Web Development, Data Structure.
- Nominated as Outstanding Graduate Student
- Nominated as Outstanding GTA for collaborating with Informatics Department in academic researches
- Graduate Scholarly Experiences Grant Award (engage graduate students with meaningful scholarly/creative/research activities.)
- Co-authored in a research paper “*A Pilot Study of Community College Student New Media Instructional Preferences*” that was published by a peer reviewed journal **The Economics & Business Journal: Inquiries & Perspectives (EBJ-IP, Volume 6 Number 1 2015)**
- Research paper “*Comparative Evaluation of Cyber Migration Factors in the Current Social Media Landscape*”, accepted for presentation at and publication in the proceedings of the International Symposium on Social Networks and Applications (**2018 6th International Conference on Future Internet of Things and Cloud Workshops (FiCloudW), Barcelona, Spain, 2018, pp. 102-107, doi: 10.1109/W-FiCloud.2018.00022**)