

Shuhei Eda

Profile

Developed a financial trading system requiring high performance and reliability at Japan's largest cryptocurrency exchange. Software engineer for nine years with excellent communication/demo skills and self-motivated attitude. Proven innovator and presenter at a global level with a successful track record of Microsoft awards and competitions.

Skills

Programming Language/Framework:

C# (.NET 5, .NET Core, ASP.NET Core, .NET Framework), **SQL** (T-SQL), **TypeScript** (React + Redux), **Python** (scikit-learn, NumPy, Matplotlib, Pandas), **PowerShell**

Cloud Platform:

Microsoft Azure

App Services, Azure Kubernetes Service, SQL Database, Azure Cache for Redis, Functions, Cosmos DB, Application Insights, Data Factory, Storage, Search, Azure Front Door, Azure Event Hubs, Media Services, Service Bus, Azure Container Registry

Amazon Web Service

EC2, S3, RDS, Aurora, VPC

Other SaaS

Terraform (Infrastructure as a Code), Datadog (Monitoring), Akamai (CDN), GitLab/Azure DevOps (Code Repo), PagerDuty (Incident Management)

Tools: Visual Studio, Visual Studio Code, Docker for Windows/Mac, PerfView, Fiddler, SQL Management Studio, WinDbg

Competencies: Microsoft Certified Solution Architect (70-532, 70-533, 70-534)

Languages: English, Japanese

Publication

- Meeting arrange Outlook add-in using React/Redux with TypeScript, Azure Function with C# (2021)
<https://appsource.microsoft.com/ja-jp/product/office/WA200002307>
- Meeting arrange bot for Microsoft Teams using C#, Microsoft Graph API, Bot Framework, and Azure DevOps. (2017)
<https://secretary.mystrikingly.com/>
- Technical book regarding Microsoft Azure which became a best seller in Amazon.co.jp. (2016)
<https://www.amazon.co.jp/gp/product/4822298914/>
- Technical book regarding Kinect for Windows V2. (2015)
<https://nextpublishing.jp/book/6403.html>

Work Experience

Lead Software Engineer – Site Reliability, bitFlyer Inc. (January 2018 – Present)

Tokyo, Japan

Worked as Site Reliability Engineer at Japan's largest crypto-currency trading website with over 2.5 million users. Responsible for identifying performance bottlenecks and fixing or re-architecting systems.

Achievements:

- Improved business critical trade processor latency from 7ms to 1ms (700%) by optimizing thread management, task parallelization, garbage collection, data structures, and business logic (2018-2020)
- Reduced system incidents by 50% through DB performance improvements, including: query optimization, index based execution plans, and data archiving (2019-2020)
- Improved team efficiency by creating a docker based debugging environment; reducing a 5-hour environment provisioning to only a few seconds (2019)

Tech Stack:

Microsoft Azure, Amazon Web Services, C#, T-SQL, .NET Framework, .NET Core, Entity Framework (OR Mapper), SignalR (WebSockets), Datadog (Monitoring), Akamai (CDN), Team City (CI/CD)

Support Engineer, Microsoft Japan (April 2012 – December 2017)

Tokyo, Japan

Responsible for front-line client IT service requests about Office 365 products from IT Pros and developers at leading companies such as Mitsubishi Electric, Coca-Cola Company, SQUARE ENIX, etc. Core tasks included managing customer expectations, resolving technical issues, and escalation to US development team. Provided technical consultation and training for customers, account managers, and sales.

Achievements:

- Achieved 100% customer satisfaction in customer service request surveys, top of team (2015-2016)
- Won “Asia Breakthrough Awards” for creating CRM Dynamics SDK for customer access (2014)
- Discovered critical bugs in IT tool; reported to appropriate divisions and provided solutions to resolve issues (2013)
- Won 1st prize of 40 competitors in Windows 8 Demo Cup, Japan; Top 12 worldwide (2012)

Tech Stack:

Microsoft Azure, C# (ASP.NET, .NET Framework), Office 365(SharePoint Online, Office Apps), PowerShell

Education

Graduate School of Osaka University (April 2010 – March 2012)

Osaka, Japan

Masters in Department of Systems Innovation, Division of Mathematical Science for Social Systems

- Researched heuristic algorithms to solve Mixed Integer Linear Programming Problem
- Studies at University of California, Davis (August 2010 – September 2010)

Osaka University (April 2006 – March 2010)

Osaka, Japan

Bachelors in Engineering Science, Division of Mathematical Science for Social Systems

Academic Research

Vehicle routing method to minimize the total transportation time (Specialization: Optimization)

Multiple vehicles are widely used for transportation systems such as Amazon’s smart warehouse. It is required to generate collision-free routing to minimize the total transportation time. We proposed an optimization algorithm for the routing to achieve the minimization of the total transportation time.

https://www.jstage.jst.go.jp/article/jamds/6/5/6_672/_article/-char/en

Scholarship: A \$25,000 non-refundable scholarship was awarded from JASSO due to the achievement.