

Astrid Gao

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WORK EXPERIENCE

Alliant Insurance Services, Inc.

August 2023 – Current

Senior Software Engineer

Seattle, WA

Work on the Voluntary Benefits team, which provides a centralized benefit hub to enhance employee benefits offerings, benefit strategy, plan design, and vendor management.

- Led the back-end development of new Voluntary Benefits websites using **.NET**, **TypeScript**, **Angular**, and **Azure** for high-profile corporate clients, creating applications that served **720k** potential users and generated **\$58 million** annual premiums.
- Re-engineered the platform's **logging** system by deploying a scalable solution with **Azure Event Hubs**, **Azure Monitor**, and **Azure Log Analytics**, increasing log processing capacity by **300%**. This enabled real-time analysis of over **10GB** of daily log data, improved system diagnostics, and reduced average issue resolution time by **70%**.
- Consolidated authentication workflows of 17 internal systems into a centralized console using **SAML2**, and developed **Single Sign-On** capabilities powered by **OKTA OAuth/OIDC**. This optimization streamlined login processes for **3k DAU**, reduced security-related maintenance efforts by **90%**, and significantly mitigated security concerns.
- Participated in developing a chatbot integrated with **OpenAI REST APIs**, **Azure Functions**, **Cosmos DB**, and **Microsoft Bot Framework**, to analyze over **500** benefit offerings on our platform. The chatbot provided personalized recommendations, increasing customer engagement by **50%** and streamlining the inquiry process.

DocuSign, Inc.

April 2022 – August 2023

Software Engineer

Seattle, WA

Worked on the Data Center Automation team, managing the DCAuto console for deployments and jobs. Focused on optimizing deployment and patching processes across the entire infrastructure to scale and streamline company-wide operations.

- Enhanced the **Continuous Deployment pipeline** using **GitHub REST APIs**, **PowerShell scripting**, and **Kusto Query Language**, reducing deployment rollback time by **70%**. This improvement increased **monitoring** capabilities, and enabled **real-time analytics**, leading to faster issue resolution and improved system reliability.
- Spearheaded the upgrade of the **Health Alert System** with **C#** and **JavaScript**, decreasing failed detection of devices with low disk space by **80%** and automating cleanup for over **1200 devices** daily. This enhancement reduced deployment downtime by **20%** and introduced real-time reporting, enabling proactive maintenance and improving operational efficiency across infrastructure and DevOps teams.
- Migrated artifacts from legacy repositories to **JFrog Artifactory**, consolidating resources and reducing storage costs by **20%**, while improving artifacts retrieval time by **40%**. This migration improved **build efficiency**, reduced deployment time, and strengthened software delivery pipeline.
- Took regular on-call rotations for high-severity incidents, promptly resolving critical customer issues and maintaining uninterrupted service for **hundred-thousands** of deployments/jobs. Ensured a **99.99% system up-time**, supporting seamless operations and customer satisfaction.

Alliant Insurance Services, Inc.

July 2020 – April 2022

Software Engineer

NYC, NY

Worked on the Executive Benefits team, which provides a centralized hub for corporate executives to enroll in Life Insurance and Liability Insurance programs, streamlining the enrollment process and improving accessibility.

- Led key **security initiatives** to enhance application security, including implementing **Penetration Test Remediation Solutions**, reducing vulnerabilities by **60%**, **Data Masking** in non-production environments to protect over **50 million** sensitive records, and deploying **Source Code Analyzer** tools that enforced best practices across entire code base, safeguarding critical information.
- Generated and analyzed data reports from over **15 million** records, conducted data migrations across databases, and performed error analysis using **SQL Server**, **T-SQL**, **PowerBI**, and the **Google Analytics Reporting API**, leading to a **15%** reduction in data discrepancies and enabling more accurate business insights.

TECHNICAL SKILLS

Skills and Competencies: C#/Java, TypeScript/JavaScript, Python, C/C++, .NET, PowerShell, Spring, React.js, Angular, Django, Flask, CI/CD, Git, SQL Server, MySQL, Kusto Query, MongoDB, IOS Development, Azure Tools, AWS

EDUCATION

Case Western Reserve University

Aug 2016 – May 2020

Bachelor's Degree in Computer Science and Economics

Cleveland, OH