

# WILSON ZHU

wzhu7148@gmail.com

(225) 421-7148

Philadelphia, PA

github.com/wilson-6731

## EXPERIENCE

---

### Senior Software Developer

Cherokee National System Solutions - Tulsa, OK

Dec 2021 - May 2025

- Led the feature development of the NuGo2 project, a USGS monitoring tool for 10,000+ water sites across the country, utilizing Spring Boot
- Architected NuGo2's testing suite to utilize the Chain-of-Responsibility design pattern for improved maintainability and flexibility
- Optimized the database queries and schema within NuGo2 to improve API performance by ~93% and reduced a significant number of joins needed to fetch necessary data
- Engineered an Insomnia plugin solution to allow users to seamlessly authenticate and access NuGo2's secured API
- Integrated dependency scanning within Gitlab CI/CD for security checks against imported project dependencies and added caching for speed and efficiency
- Documented the software design and architecture of NuGo2 to ease the onboarding process for new team members, ensuring smooth maintenance support and future development

### Application Developer

IBM - Baton Rouge, LA

Jan 2018 - Dec 2021

- Collaborated with IBM clients to develop and maintain applications based on their requirements and needs
- Developed and maintained governance checks under PNC for hundreds of retail teams deploying via Jenkins to ensure services are free from security vulnerabilities and ensure they are rigorously tested before it is released to production in Openshift
- Created backwards compatible SSO flow for Honda to provide support to the legacy HondaLink and AcuraLink mobile applications as well as the updated web applications written using Angular and NodeJS as the backend
- Developed an authorization microservice to provide OAuth 2.0 support for Honda's support of the Amazon's In-Car Delivery service
- Created a suite of microservices to interface with Honda's TCUs to provide a wide variety of telemetry and commands to 2020 and 2021 Honda/Acura vehicles using Spring Boot

## KEY SKILLS

---

### Languages

Java, Groovy, Javascript, Typescript

### Technologies

Spring Boot, Angular, Git, Bash, JUnit, Spock, Jenkins, Openshift, AWS, Postgres

## EDUCATION

---

Louisiana State University - BS in Computer Science

Aug 2014 - Dec 2017