

Experience

ExxonMobil: Full-Stack Software Developer

July 2018 - Present

- NextPlan - Permian planning application
 - Built a system that consumes and presents 30 million data points (yearly planning data) from legacy excel-based applications
 - Related data across disparate groups, manages approvals and aggregates data for high-level manager reports
 - Developed Unconventional IT's first production azure application
 - Automated workflows and simplified communication for highly skilled employees resulting in dramatic cost/time savings
 - Connected NextPlan data sources to external systems for automated calculations and visualizations that do not require IT support
- Master Data Integration (MDI) - Master well data application
 - Aggregated data from 11 source systems to create a single record for business entities (500,000 entity records)
 - Deployed Unconventional IT's first API driven application primarily as a consumer, but also aided with design of APIs
 - Supported 450 unique monthly users (average over past year) with minimal IT cost
 - Tremendously reduced friction between business units and data relevant to various workflows, resulting in dramatic time savings
- Land Documents Workflow (LDW)
 - Created custom API endpoints for sibling application to create/manage LDW items
 - Supported the application while it processed 250,000 unique images by a dozen of groups
 - Expanded application to simplify workflows for
- General
 - Reviewed Pull Requests and mentor new developers on best practices or common patterns
 - Developed console applications for scheduled tasks to automate data synchronization and workflows
 - Used and created REST APIs to make valuable business data easily accessible across a large organization
 - Consulted with business customers to gather requirements and carefully communicate concerns about feasibility

Skills & Technologies

- *Programming Languages:* C#, T-SQL, JavaScript, Java, Python, C/C++ and MIPS Assembly
- *Software & Tools:* Git, Visual Studio, .NET Framework, .NET Core, SQL Server Management Studio, IIS, Matlab, ModelSim, Quartus, FidelisXPS, Qradar and Forensic Tool Kit
- *Operating Systems:* Windows and Linux
- *Cloud:* Azure DevOps, Azure Pipelines, Azure App Services, Azure SQL Azure CLI, Azure Active Directory and Graph API
- *Misc.:* Oauth2, Verilog, Bash, Zsh, and Powershell

Education

Oklahoma State University – Stillwater, OK
Bachelor of Science, Electrical Engineering
Bachelor of Science, Computer Engineering
Minor in Mathematics

Aug. 2014 - May 2018

GPA: 3.97

Other Work Experience

Oklahoma State University: Teaching Assistant

Aug. 2017 - May 2018

- Tutored students during office hours
- Graded/proctored exams and quizzes

QuikTrip: Store Clerk

June 2015 - Aug. 2015

- Interacted with customers to provide an excellent in-store experience
- Cleaned store, manage inventory and prepared food in the QT Kitchen

Projects

Elliptic Curve Cryptography

Wrote a python implementation of elliptic curve cryptography with only random, math, and sys as external dependencies. The library generates public/private key pairs, encodes/decodes strings onto the curves and encrypts/decrypts securely. Limitations are hardware-dependent (performs well with 1000 digit integers on laptop-class CPUs).