

## Experience

*ExxonMobil: Full-Stack Software Developer*

*July 2018 - Present*

Reservoir Management Data Environment

- Developed Angular front end and .NET Framework API for reservoir engineers to save forecast data as well as integrate it with volume and header data
- Supported Power BI dataflows which powered user-created visualizations and reports
- Built CI/CD pipeline in Azure DevOps to automatically update Azure Resources and deploy application for rapid development

NextPlan

- Led development on a system that consumes 30 million data points from legacy excel-based applications
- Automated financial forecast workflows as well as data visualizations and simplified communication between reservoir engineers, planners and managers
- Secured proprietary data with role-based access (Azure AD and OAuth 2.0)
- Designed and deployed the first Unconventional IT application in production Azure environment leveraging message queues and Azure webjobs to handle long running web requests

Master Data Integration - Master well data application

- Built the user interface for an API system which defined the single source of truth for well data within XTO (500,000 entity records from 11 source systems).
- Assisted data management team on API design to minimize long-term support for the application, which averaged 450 unique users each month

Legacy Web Applications

- Developed and supported web based document management system that routed millions of documents to destination systems for \$700,000 annual savings
- Designed web APIs to integrate and modernize a family of legacy applications
- Supported custom web application responsible for creating the official accounting record for new wells

*ABB: Software Engineering Intern*

*June 2017 - Aug. 2017*

- Programmed embedded microcontrollers designed for upstream oil and gas automation
- Updated desktop application to properly utilize new embedded functionality and communicate with embedded system

*Phillips 66: Vulnerability Management Intern*

*May 2016 - Aug. 2016*

- Monitored network traffic, hunted for potential threats and investigated vulnerabilities
- Participated in incident response events as well as red team/blue team exercises
- Completed forensic analysis of compromised or suspicious hard drives

## Skills & Technologies

- *Programming Languages:* C#, TypeScript, T-SQL, JavaScript/HTML5/CSS3, Java, Python, C/C++, MIPS Assembly
- *Software & Tools:* Git, Angular, Visual Studio, VS Code, .NET Framework, .NET Core, SSMS, IIS
- *Cloud:* Azure Pipelines, Azure App Services, Azure SQL, Azure CLI, Azure AD (and OAuth 2.0), Graph API, CosmosDB, Azure Data Factory

## Education

Oklahoma State University – Stillwater, OK

*Aug. 2014 - May 2018*

*Bachelor of Science, Electrical Engineering*

*GPA: 3.97*

*Bachelor of Science, Computer Engineering*

*Minor in Mathematics*

## 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).