

Experience

ExxonMobil: Full-Stack Software Developer

July 2018 - Present

NextPlan - Permian Development planning application

- Led development on a system that consumes 30 million data points from legacy excel-based applications
- Related data across groups; managed approvals and aggregated data for manager reports
- Automated financial forecast workflows and simplified communication between reservoir engineers, planners and managers
- Connected NextPlan data to external systems for calculations and visualizations
- 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 aggregated data from 11 source systems to create a single record for business entities (500,000 entity records)
- Assisted data management team on API design to simplify development and minimize long-term support cost
- Acted as the only support staff for an average of 450 unique monthly users

Legacy Web Applications

- Developed and supported web based document management system that routed millions of documents to destination systems which allowed the business to stop managing paper documents. Approx. \$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 in Unconventional business unit

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

- Coordinated with operations team to prioritize security efforts minimizing risk with limited resources
- 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
- Automated existing processes through scripting and refining rule management

Skills & Technologies

- *Programming Languages:* C#, T-SQL, JavaScript/HTML5/CSS3, Java, Python, C/C++, MIPS Assembly
- *Software & Tools:* Git, Visual Studio, .NET Framework, .NET Core, SSMS, IIS, Matlab
- *Operating Systems:* Windows, Linux
- *Cloud:* Azure Pipelines, Azure App Services, Azure SQL, Azure CLI, Azure AD and Graph API
- *Misc.:* OAuth 2.0, Verilog, Bash, and PowerShell

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).