

[First Name] [Last Name]

[email] | [LinkedIn Profile Link] | [City]

EXPERIENCE

Application Engineer

Oct. 2018 – Present

[Engineering Consulting Firm]

- Wrote PowerShell script that automated computationally intense calculations which reduced load on client servers and time spent on task by 67%
- Created SQL data pipeline to process millions of data points for validating engineering calculations
- Used PowerShell and .NET assemblies to extract, transform and load millions of time series data points
- Coded console application that created file backups of time series database resources using C#
- Created command line interface for interacting with time series database using PowerShell and .NET
- Developed custom extensions for data visualization web app that utilized REST API using JavaScript, CSS, HTML, and AngularJS
- Assessed client data historian usage and condition by using Python and Jupyter notebooks to analyze their operations data

Analysis Engineering Co-op

Jan. 2018 – Jun. 2018

[Automotive Company]

- Developed new cooling system model accounting for unobserved thermostat valve conditions
- Dropped computation time of engine benchmark from minutes to seconds by coding a Python script
- Optimized fuel system model to +/-3% of test data by analyzing DOE simulation data trends with Pivot Tables
- Explained simulation results in meetings with product development teams of 6 different engines

PROJECTS

Newsletter Data Web App

Nov. 2021 – Present

[Newsletter]

Project URL: <http://cdh-dev-1.eba-8zfufjs3.us-east-1.elasticbeanstalk.com/>

- Developed data analytics web app using Python and AWS for email newsletter with 4300+ subscribers
- Designed serverless back end using AWS Lambda and DynamoDB
- Created front end using Python Dash and Elastic Beanstalk
- Generated new datasets from different sources that provided new insights using Python and Pandas

Ethylene Glycol Plant

Aug. 2020 – May 2021

[University]

- Designed chemical separation equipment using Excel Solver, VBA and chemical engineering calculations
- Forecasted chemical prices from 2022 – 2042 using price model developed with Python and SciPy
- Performed discounted cash flow analysis for plant operation over a period of 20 years using Excel

EDUCATION

[University]

Graduation Date: May 2021

- Bachelor of Science in Chemical Engineering
- GPA: 3.077

SKILLS

Programming Languages: Python, C#, PowerShell, VBA, JavaScript

Libraries: NumPy, Pandas, SciPy, Dash, matplotlib

Frameworks: .NET, AngularJS

Software: Heroku, AWS, CircleCI, Microsoft Excel