

EDUCATION

- **Temple University**

Philadelphia, PA

B.A. in Actuarial Science with minor in Computer Science; Summa Cum Laude

Aug. 2015 – May. 2019

EXPERIENCE

- **SimpliSafe**

Boston, MA

Data Engineer

Nov 2021 - Present

- Expanded and improved data platform which serves hundreds of terabytes of data to dozens of teams across the organization
- Helped lead migration to an AWS EKS Dagster deployment designed to run 300+ data pipelines in a reliable and scalable way
- Utilized blue-green deployment strategy for view materialization to reduce down time when running a CTAS query over an existing table
- Implemented a parser for converting protocol buffer definitions to parquet schemas

- **John Hancock Life Insurance**

Boston, MA

Actuarial Associate

May 2019 - Nov 2021

- Wrote a python script for allocating \$3 billion in aggregate variable annuity reserves to individual policies and validated results with unit tests
- Wrote a transpiler for translating code written in a domain specific business language to valid excel formulas, saving hundreds of hours of manual translation
- Prepared quarterly capital and remittance forecasts and communicated results to senior management

- **John Hancock Life Insurance**

Boston, MA

Actuarial Intern

May 2018 - Aug 2018

- Utilized specialized actuarial software to run life insurance sensitivities for a new Universal Life product
- Reviewed financial calculations and VBA code for a new guaranteed issue final expense product
- Assisted pricing team in moving a model from excel to python by building a script to load initial rates

ACCOMPLISHMENTS

- **AWS CCP Exam (2022):** Passed AWS Certified Cloud Practitioner Exam, which tests high-level knowledge of AWS fundamentals
- **Associate of the Society of Actuaries (2021):** Passed 8 exams encompassing data analytics, financial mathematics, and statistics to achieve the A.S.A credential

PROJECTS

- **PDP-11 Emulator:** Wrote an emulator and assembler for a large portion of the original PDP 11 instruction set
- **Markov Chain Visualizer:** Wrote a python program which generates GIFs of markov chains, primarily intended for teaching purposes

PROGRAMMING SKILLS

• **Languages:** Python, SQL, Bash

Technologies: AWS, CDK, Dagster, Docker, Kubernetes