

Patrick Hennecke

Relevant Employment

SolExergy

Full Stack Developer

February 2020 - July 2021

- Sole developer with no prior professional experience - which led to thorough research and education for myself about the job and how to get the job done and in addition, assuring the CEO that I can complete the project in a timely manner
- Designed and created cloud based mobile app for internal project management and reported directly to the CEO
- Familiarized and utilized architectures such as MVC and MVVM along with multiple other database support tools pertaining to the use of SQL, Entity Framework, Azure, and more
- Create, manage, update, and test front end mobile application (Xamarin forms - Xaml & C#) and back end (C#, Entity Framework, .Net)
- Multiple releases of iOS app to TestFlight

University of New Mexico

Teaching Assistant

August 2016 - May 2017

- Grading various Undergraduate Math coursework - Algebra, Differential Equations and Probability & Statistics

Angelo State University

Math Tutor

January 2013 - August 2016

- Tutored in all Undergraduate Math courses - Calculus I & II, Differential Equations, Prob. & Stats, Real Analysis, Business Calculus, College Algebra, Trigonometry, PreCalculus, Contemporary Mathematics, Discrete Mathematics, Linear Algebra, Engineering Dynamics, Physics I & II and Chemistry

Student Assistant

August 2015 - May 2016

- Assist in teaching MatLab and the utilization of basic algorithms, such as, polyfit - to fit a line to a criteria
- Assist in teaching the use of Microsoft Excel, \LaTeX and LyX and help class with course material and homework

Education

University of Texas at Arlington

Master of Science in Data Science

December 2023

University of New Mexico

Master of Science in Applied Mathematics

One year completed

Relevant Coursework: Numerical Analysis (504) - topics such as Jacobian, Cholesky, Linear Regression, Gradient Descent and more

Modeling of Infectious Diseases (Biol 511), Applied Matrix Theory (514), Differential Equations (512), and Complex Variables (561)

Angelo State University

Bachelor of Science in Mathematics

May 14th, 2016

Minor: Physics

Relevant Research: No publications

Research in Complex Analysis with Dr. Trey Smith

Research in Battery Technology with Dr. Andrew Wallace

Languages, Technologies & Concepts

- Python (1 year) -
Pandas, Numpy, Scikit-learn, and Flask
- SQL (1 year)
- R (1 year)
- C++ (1 year)
- C# (2 year)
- Matlab (6 year)
- L^AT_EX(3 year)
- Xaml (2 year)
- HTML (0.5 year)
- CSS (0.5 year)
- Various algorithms - KNN, Linear and Logistic Regression, Gradient Descent, SVC, and more
- Git
- Azure
- Object Oriented Programming
- CI/CD
- .Net
- MVVM
- MVC
- Entity Framework