

# Patrick Hennecke

1010 Crown Valley Dr. Weatherford, TX 76087  
pathennecke8@gmail.com

(832) 247-8655

## Relevant Employment

---

### SolExergy

#### *Full Stack Developer*

*February 2020 - Present*

- 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

---

- C++ (1 year)
- C# (2 year)
- Python (1 year) -  
Pandas and Numpy (.25 years)
- SQL (1 year)
- R (1 year)
- Matlab (6 year)
- L<sup>A</sup>T<sub>E</sub>X(3 year)
- Xaml (2 year)
- HTML (0.5 year)
- CSS (0.5 year)
- Azure
- CI/CD
- Git
- .Net
- MVVM
- MVC
- Entity Framework
- Linear Regression
- Gradient Descent