# Zachary Blackwood

## Data Scientist and Python Developer

### Experience

### DTN, West Lafayette, IN Data Scientist, April 2018-Present

- Deploying and maintaining infrastructure for the data science team on AWS, including scalable computing, and data access/storage
- Training developers in Python development and best practices
- Developing and productionalizing the models for Storm Impact Analytics
- Creating and maintaining a data catalog used by Data Scientists across the company to access data for modeling and analysis

### Spensa Technologies, West Lafayette, IN Web Developer, July 2015-April 2018

- Developing end-to-end features with both detailed and limited specifications
- Managing web and database servers along with expandable storage tools through AWS
- Communicating with numberous third-party organizations regarding various tools and integrations
- Integrating with several third-party services to allow users to asyncronously move their data to and from these other services
- Project management for multi-million dollar long-term contract, including prioritizing tasks, training and assistance for a team of developers and managing customer relationships
- Responding to and diagnosed server outages and customer issues

### Lewis Cass, Walton, IN High School Teacher, September 2010-July 2015

- Teaching courses including Physics, Computer Science & Software Engineering & Principles of Engineering
- Introduced multiple new courses to the school, including beta-teaching PLTW Computer Science
- Researching, developing, delivering and revising effective lessons
- Creating and mentoring the Iron Kings, a FIRST Robotics team, who were able to advance to the World Championship in our rookie season
- Mentoring the team members in fundraising, software development, electrical wiring, etc. in the process of creating our robot

### Technical Experience

Open Source   Contributed to a number of python libraries, including intake
- intake-geopandas • apache arrow

Helped to create a custom plugin for Intake which allows for the automatic population of a data catalog with data files matching a certain pattern

| Programming Languages | high proficiency: Python |
| | medium proficiency: JavaScript |
| Technical Tools | ci/cd tools: Bitbucket pipelines, GitLab, Bamboo |
| | data science packages: Pandas, Intake, Scikit-learn, Lightgbm |
| | cloud architecture: Amazon Web Services (Batch, Fargate, Lambda, EC2, S3, RDS, CloudFormation, CloudWatch, IAM) |
| | web development: Django, backbone.js, Postgresql, Postgis, Django Rest Framework, HTML, CSS |
| Side projects | Web development, design & hosting for various non-profit sites such as: |
| | Gentle Reformation ● Women's Retreat ● How Shall We Then Vote |

## Education

| 2009-2011 | M.S.Ed, Mathematics and Physics Education; Purdue University (West Lafayette, IN) |
| 2005-2009 | B.S., Math & Physics; Purdue University (West Lafayette, IN) |
| | Minor: Computer Science |

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