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## Professional Profile

### Career Objective

I am looking for an opportunity to practice AI, specifically deep learning techniques, in a practical application.

### Skills Summary

- Primarily fluent in Python, R, C#, and many SQL dialects, secondary experience with Java, C/C++, Perl, Visual Basic, Javascript, Shell, Batch, Powershell, MS Office, Windows, and Linux.
- Machine learning and big data architecture with practical knowledge in linear algebra, neural networks and statistical methods, communicating complex ideas easily in Confluence.

## Professional Experience

### Jackson National Life, Lansing, Michigan

#### Sr. AI Engineer

2018 – 2022

Primary contributor to data engineering and analytics architecture for Jackson. I created secure streaming and batch processes for populating data lakes, both Cloudera and ADLS, using a platform independent dockerized Spark code, that implemented self-healing concepts and idempotence. I also developed a CRISP-DM based model development lifecycle compatible with agile processes, that wove the responsibilities of data engineering, data scientists and AI engineers into a production pipeline for AI, that satisfied the legal, risk, and information security requirements.

#### Sr. Capacity Planner

2011 – 2018

I was the primary contributor to the creation of the Capacity Planning department at Jackson, leading a team of 3-4 people. I created production automated processes that ran regression analysis to forecast expected hardware and software usage patterns based on projected business usage reducing our capacity related events to near 0. I used cluster analysis to profile servers, enabling a huge reduction of our data center estate (80-90%). I brought Hadoop and related technologies to Jackson, successfully data engineering with R and Python the consumption of performance metrics at a scale of 270 TBs/yr with tables with 3 trillion rows of data, with excellent performance.

#### Sr. Software Developer

Jun 2005 – 2011

I specialized in automated systems in C#. I designed and was the lead implementer for the automation frameworks and all automated processes for Jackson's nationwide broker dealer network (NPH, NPC, SII, INVEST, ICA). During this tenor, I overhauled a fragmented, error prone set of about 100 automated processes written in Perl, VBA, Java, and few other languages and converted them into a .Net application, all the while increasing the amount of automation to 10,000 jobs and reducing our error rate to near 0, nearly eliminating the need for costly support teams.

## Education

### Michigan State University, Lansing, Michigan

Ph.D. in Probability and Statistics

August 2024 – Current

Masters of Science – Statistics

August 2022 – August 2024

### Central Michigan University, Mt. Pleasant, Michigan

Bachelor of Science - Business Administration

August 2019 – May 2022

### Lansing Community College, Lansing, Michigan

Associate of Science Degree - Mathematics and Physics

August 2010 – Dec 2013

### Oakland University, Rochester, Michigan – Computer Science

August 2001 – May 2003

### Oakland Community College, Highland, Michigan – Computer Science

August 1999 – August 2001