

Contact

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Top Skills

Data Mining
Data Analysis
Statistics

Certifications

Business Analytics Certificate
Developer Certification for Apache Spark

Honors-Awards

European Union Erasmus Mundus Fellowship
Full Funded Scholarship for Engineering

Publications

Classification Framework For Digital Preservation Platforms
A mHealth Architecture for Diabetes Self-Management System
Active Learning For Automation of Knowledge Generation: The Case of Rare and Expensive Training Dataset
Text Analytics for Automation of Medical Systematic Review Creation and Update
MUST-Plus: A machine learning classifier that improves malnutrition screening in acute care facilities

Prem Timsina

Machine Learning Leader
New York City Metropolitan Area

Summary

- Experiences on building multi-disciplinary data science team from scratch.
- As an engineering leader and manager, build the end-to-end ML platform with ROI over tens of millions of dollars. The Machine Learning Platform is deployed over multiple sites housing dozens of production machine learning software.
- Hands-on experience and expert knowledge of data analytic tools including Apache Spark, Scala, PyTorch, Spark MLlib and Python.

Experience

Mount Sinai Health System
Director, Data Science
January 2017 - Present (6 years 4 months)
Greater New York City Area

Responsibilities:

- Responsible for machine learning systems within organization. Currently, responsible for over 50 data products.
- Build multiple teams to manage end-to-end data products—for example, Data Science Team, Machine Learning Engineering Team, and Infrastructure Team.
- Lead multiple high impact projects collaborating with external partner organizations.
- Lead team creating some of the highly successful decision support systems in the healthcare sector. Those products were pivotal for organizational designation of “World Best Smart Hospitals”
- Advice to CIO & CTO related to organization’s strategy on analytics and machine learning.
- Overall Management Experience—People Management, Team Strategy, Finance, Legal etc.

Impact

- Developed the operational Machine Learning Platform (from scratch) at Mount Sinai with documented ROI of over dozens of millions dollars. The platform hosts multiple streaming and batch ML models deployed at multiple sites across NYC.
- Build the first operational machine learning platforms at Mount Sinai Health Systems
- Hosts dozens of ML Apps across of 8 sites. Malnutrition Predictive Engine with ROI over dozens of millions dollars, Patient Visit Prioritization Tool ,Early Identification of Patient Deteriorations, Goal of Care

Awards and Designation

- Designated Role Model three years in row (2019, 2020, 2021)

Remedy Partners

Data Scientist

October 2015 - January 2017 (1 year 4 months)

Greater New York City Area

- Created Machine Learning Platform that supports: data extraction, cleaning, machine learning model building, prediction and visualization
- Created multiple batch and real-time machine learning software. For example, hospital readmission prediction, length of stay prediction, etc.
- Coded, tested, debugged, implemented, and documented apps using Spark, Scala, and Python

Key Accomplishments:

- Built predictive model with 40% better than existing workflow
- Deliver responsive data visualization for higher management

Dakota State University

Data Science Researcher

February 2012 - September 2015 (3 years 8 months)

Madison, SD

- Designed Systems for mobile applications. The system was published and has over 600 citations.
- Designed and developed diabetes self-management applications for community hospital.
- Conducted research with the goal to reduce the costs involved with medical knowledge creation. Text mining tool was created that used fusion of supervised learning and semi-supervised learning
- Conducted research on various machine learning problems: training with small dataset, class imbalance issue etc.

Key accomplishment

- o Published over 8 articles producing over 400 citations
- o Work was featured by the Department of Health and Human Services (HHS).
- o Created software for local hospital

IUT LAB, Lumiere University France

Researcher

September 2009 - June 2010 (10 months)

- Investigate Technique for Long Term Knowledge Preservation
- Project was funded through the European Union to uncover a technique for long-term knowledge preservation.
- Employed the use of Dspace, Fedora, and Eprints for long-term knowledge preservation.

Key Accomplishments:

- Study resulted in one conference presentation. (SKIMA-2010).

Education

Harvard University

Essential Management Skills For Leaders, Business and Social Skills · (2020 - 2020)

Dakota State University

Doctor of Science, Machine Learning · (August 2011 - May 2016)

Dakota State University

Doctor of Science, Data Analytics · (2011 - 2015)

Dakota State University, Madison, SD

Master's Degree, Computer and Information Sciences, General · (2011 - 2014)