

Data Science Leader

Accomplished, dedicated, innovative, and energetic **Data Science and Machine Learning Leader** with an entrepreneurial spirit and 10+ years of transferable experience in fast-paced technical and business environments. Seasoned in conducting high-level and complex research using various machine learning algorithms, API's, and tools. Proven track record of researching, adopting, and utilizing custom mathematical tools to drive data science initiatives. Hands-on leader and collaborator with excellent communication, organization, analytical, critical thinking, and problem-solving skills. *Areas of expertise include:*

Deep Learning : Tensorflow, Keras, Sci-kit Learn, Weka, PyTorch
Languages : Python, R, C++, C#, Java, C, Javascript, PHP
Platforms : Anaconda, Matlab, SPSS, SAS, Visual Studio, Databricks, Hadoop
Database : SQL Server, MySQL, Oracle SQL, PostgreSQL, EDF, XML, JSON
Cloud : Amazon, Google, Azure
Signal Processing : Wavelets, PyWavelets, EEGLab, Matlab DSP
Parallel Computing : CUDA, MPI, GPU
Project Management: Contract Negotiations, Project Planning, Resource Management, Project Roadmap, Team Leadership
Software Engineering: Requirements Engineering, Unit Testing, Software Life Cycle, RESTful Services, SOAP Services
Other Skills : Workflow Design, Top-Down Analysis, Abstraction, Modeling, Pedagogical Strategies

EDUCATION & CERTIFICATIONS

Degrees

Ph.D. in Computational Science Candidate

Middle Tennessee State University (Aug 2020)

Master of Science in Computer Science

University of Illinois (Aug 2015)

Bachelor of Science in Mathematics

University of Tennessee (May 2011)

Most Recent Certifications

Intermediate SQL (2019)

Ensemble Methods in Python (2019)

Advanced Deep Learning with Keras in Python (2019)

Deep Learning with Keras in Python (2019)

Signal Processing Problems (2019)

Unsupervised Deep Learning in Python (2019)

CAREER & EDUCATIONAL PROJECT SUCCESS

THE AI INSTITUTE, CAMBRIDGE, MA

OCTOBER 2019 – DECEMBER 2019

DATA SCIENTIST

- Practiced Data Science and AI within 480 hours intensive and practical bootcamp.

SLEEP RESEARCH CONSORTIUM, MURFREESBORO, TN

JANUARY 2018 – PRESENT

DIRECTOR, DATA & TECHNOLOGY

- Play a key role in designing, funding, and completing research projects using Machine Learning (SciKit-Learn, TensorFlow, Custom) and statistical analysis (SPSS, Custom) on secure Linux servers.
- Selected to aid in analyzing a nationally-recognized sleep research project focused on treatment (CPAP) efficacy.
- Authored a five-year research topic that was instrumental in establishing University-level sleep research partnerships.

COAST TO COAST INNOVATIVE SOLUTIONS, NASHVILLE, TN

JANUARY 2016 – PRESENT

CONSULTANT

- Oversee the daily operations and strategic priorities of the company, including managing all IT, data, finance, advertising, and software application initiatives.
- Created a SQL script that reduced processing time from six months to as little as three hours, thereby cutting client costs and maximizing overall company profitability.
- Recruited by physician practice clients to design and implement custom automation tools for use across their claims management, billing management, practice management, population health, and research activities.
- Provide hands-on training to clients and ongoing support, including data management and performance monitoring.

MIDDLE TENNESSEE STATE UNIVERSITY, MURFREESBORO, TN

JANUARY 2017 – JULY 2019

RESEARCH CONSULTANT (JANUARY 2017 – JULY 2019)

- Directly collaborate with local businesses to create research questions and source appropriate tools and methodologies that answer research-based questions.

GRADUATE TEACHING / RESEARCH ASSISTANT (SEPTEMBER 2016 – JULY 2019)

- Work on a dissertation, *Single Channel EEG Sleep Characterizations Basis for Disease Detection and Sleep Staging*, including utilizing TensorFlow, EEGLab, MATLAB Signal Processing, and other core technologies.
- Create and implement lesson plans for Ph.D.-level courses in C++ programming and analysis of algorithms, Python, HTML, and Microsoft Office.

ADDITIONAL EXPERIENCE

COAST TO COAST MEDICAL, NASHVILLE, TN

JANUARY 2008 – DECEMBER 2015

DIRECTOR OF INFORMATION TECHNOLOGY (AUGUST 2013 – DECEMBER 2015)

- Promoted to spearhead all aspects of the group's IT processes and operations, including managing numerous concurrent IT, data, website, and software projects and priorities.
- Designed automated data extractions over secured networks, including custom coding (ICD-9 to ICD-10) conversions.
- Co-developed an automation process for physician practice modeling, monitoring, and analysis, a solution that reduced costs to clients and increased company profitability.
- Utilized the coding (ICD-9 to ICD-10) conversion tool to reduce man-hours required for manual conversions, thereby further enhancing profitability of the company.

EPM / EHR CONSULTANT (NOVEMBER 2012 – JULY 2013)

- Served as the Team Lead for training and monitoring for MU, PQRS, CQM, ICD-10 conversion, and other implementations.
- Developed the process for ICD-9 to ICD-10 conversions and related clinical documentation improvement elements.
- Leveraged existing software functionality to create a workflow for allergy departments that was nationally recognized.
- Enabled a \$10K+ cost savings in requirements incentives by manually extrapolating meaningful use data from the database to achieve even greater efficacy for clients.

HIM CONSULTANT (JANUARY 2008 – DECEMBER 2010)

- Collected a diverse array of EHR data and trained cross-functional staff on coding and claims submission.

Additional Career Experience:

Math Instructor, Mathnasium, Murfreesboro, TN (2016)

Systems Analyst, Take Care Health, Franklin, TN (2013)

EHR Implementation Specialist, Global Medical Partners, LLC (2012 – 2013)

EHR Implementation Specialist, Greenway Medical Technologies (2011 – 2012)