

Data Science Leader

Accomplished, dedicated, innovative, and energetic **Data Science and Software Engineering Leader** with an entrepreneurial spirit and 10+ years of diverse and 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:*

**Data Science • Organizational Leadership • Project Management • Software Engineering • Team Leadership
Database Design & Development • Software Programming • Systems Design • Business Operations Management
Top-Down Analysis • Abstraction • Modeling • Digital Signal Processing • AI/ML Algorithms • Workflow Design
Client Relationship Management • Theoretical Mathematics • Business Writing**

Technical Snapshot: Microsoft Office Suite, UNIX, LINUX, C, C++, C#, Python, MATLAB, SQL, .NET, Oracle, Perl, Java, JavaScript, CSS, HTML, PHP, Bash, Fortran, JQuery Mobile, Mathematica, R, MPI, OpenMPI, Jupyter, SciKit-Learn, TensorFlow, SPSS, CUDA, Machine Learning Tools

EDUCATION & CERTIFICATIONS

Ph.D. in Computational Science Candidate | Middle Tennessee State University, Murfreesboro, TN (Expected May 2020)

Master of Science in Computer Science | University of Illinois, Springfield, IL (2015)

Bachelor of Arts in Mathematics | Knoxville, TN (2011)

AJAX Programming Certification | University of Tennessee, Knoxville, TN (2014)

SQL Certification | University of Tennessee, Knoxville, TN (2012)

Intermediate C# Certification with .NET | University of Tennessee, Knoxville, TN (2012)

Python AI Course (In Progress) | Website: Udemy.com | Instructor: Lazy Programmer, Inc

CAREER & EDUCATIONAL PROJECT SUCCESS

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 CPAP efficacy.
- Authored a five-year research topic that was instrumental in establishing University-level sleep research partnerships.

MIDDLE TENNESSEE STATE UNIVERSITY, MURFREESBORO, TN

JANUARY 2017 – PRESENT

RESEARCH CONSULTANT (JANUARY 2017 – PRESENT)

- 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 – PRESENT)

- Currently finalizing 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.

COAST TO COAST INNOVATIVE SOLUTIONS, NASHVILLE, TN

JANUARY 2016 – PRESENT

OWNER

- 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.

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 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 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)