Thomas Gadfort

1163 Timberlane Ct • Naperville, IL 60540 206.351.4510 • tgadfort@gmail.com

Data Science & Quantitative Analysis Professional

Driven, technically-savvy professional with a decade of accomplishments in scientific research in experimental particle physics and the fields of data science and quantitative analysis. Experience collaborating with and leading diverse, international teams on the analysis of large, complex data. Exceptional communicator with experience presenting results and drafting content for a business audience. Ph.D. with a history of academic excellence.

Areas of Strength

Data Modeling • Statistical Analysis • Research • Big Data • Data Mining • Public Speaking • Team Leadership

PROFESSIONAL EXPERIENCE

ARITY, Chicago, IL

Senior Data Scientist, 2018 - Present

Lead data scientist for the consumer experience team

- Sole developer of a sophisticated driver classification model using network graphs within a Spark environment.
- Created a PoC for a predictive model combining automobile diagnostic data and driving behavior information.

ANTHEM INC, Chicago, IL

Senior Data Scientist, 2016 - 2018

Lead model builder for the consumer health profile initiative

• Primary technical developer for five predictive models, using claims data access via Teradata SQL, designed to improve cost-of-care (CoC) savings for expensive medical procedures.

KARVY ANALYTICS LTD, New York City, NY

Senior Data Scientist, 2015 - 2016

Consultant for a leading health insurance company in the United States.

• Served as lead data scientist for the American division of Karvy, based in Hyderabad, India. Responsible for technical discussions during client presentations and building Python-based machine-learning environment.

OPEN DATA GROUP, River Forrest, IL

Technical Staff, 2014 - 2015

Leader of real-time cyber security model development team.

 Advanced anomaly detection techniques using real-time internet data from several Fortune 500 company networks. Daily traffic and detection alert-rates summarized using Hadoop and R scripts.

FERMI NATIONAL ACCELERATOR LABORATORY, Batavia, IL

Associate Scientist, 2012 - 2014

Responsible for scientific data analysis and project management for the U.S. Department of Energy.

Developed regression models to measure storage ring properties from high-volume time-dependent signals.

BROOKHAVEN NATIONAL LABORATORY, Upton, NY

Goldhaber Fellow, 2009 - 2012

Three-year appointment to support scientific research for the U.S. Department of Energy.

 Collaborator of the ambitious and renowned ATLAS experiment team, coordination of analysis and mining efforts, and sophisticated statistical analysis of data including the groundbreaking Higgs Boson discovery.

EDUCATION & HONORS

Ph.D., High Energy Physics, University of Washington, Seattle, WA (2007) Eugene Kenneth Miller Award for Graduate Research

B.A., Physics and Mathematics, University of Tennessee, Knoxville, TN (2001) Douglas V. Roseberry Award for Excellence in Physics, Phi Beta Kappa, Sigma Pi Sigma Honor Society

SOFTWARE & TECHNICAL EXPERTISE

- Office and OS Applications Windows, Unix, Mac, MS Office, and Mac OS Office Suite (Keynote, Pages)
- Programming Languages Python, R, C, C++, FORTRAN, PHP, Java/Scala, Perl, Shell scripting
- Big Data Tools Hadoop (HDFS, Hive), Spark, Git, Teradata SQL, scikit-learn (Python), Caret (R)
- Machine Learning/Modeling Multidimensional clustering, Regression, Decision trees, Neural Networks