Daili Zhang

Data Scientist - SITA

Houston, TX - Email me on Indeed: indeed.com/r/Daili-Zhang/998a391b26ad6047

Advanced engineering education background with hands-on analytics development, system modeling & simulation, data analysis experience

SKILL

• Advanced knowledge on various machine learning models
• Highly proficient in Python, SQL database, Matlab, JMP, and VBA; good knowledge of Java, Hadoop Ecosystem (Hive, Pig, etc.), Tableau, Fortune, ModelCenter, C, C++ and R
• Extensive hands-on experience on developing analytics for equipment reliability & availability prediction, equipment performance diagnostics & prognostics
• Well-versed in engine design, performance & operation, engine diagnostics & prognostics, system integration & optimization, and data analysis; highly proficient in different gas turbine/combined cycle modeling and simulation tools, including NPSS, APPS, GTP, etc.
• Learning new skills in a diligent and fast way

Willing to relocate: Anywhere
Authorized to work in the US for any employer

WORK EXPERIENCE

Data Scientist

SITA - June 2017 to Present

Predict flight delay time with big sets of data and different machine learning methods

Senior Data Scientist

GE Power Service - March 2015 to May 2017

Develop the road map of analytics to enhance diagnostic & prognostic and life prediction capabilities for expensive power generation equipment, improve the equipment performance & operability, optimize the maintenance schedule and increase equipment reliability & availability

• Provided the roadmap with actionable steps on developing analytics to address the challenges of engine real-time performance prediction
• Led on an intelligent engine status tracker project to detect engine performance trend/shift, provide insight information to diagnose on component level of gas turbine by utilizing advanced algorithms
• Led on a pilot project to visualize the real-time engine performance and provide aggregated information to help customer better monitor engine
• Developed sets of analytics to predict parts conditions into the repair shop and engine/generator components life expectation

Lead Performance Engineer

GE Power Service - May 2010 to March 2015

Engine performance modeling & simulation, risk analysis, project proposal, customer service, engine field testing & diagnostics, etc.

• Led the development of APPS (Aero-derivative Engine Performance Evaluation

Software) with proficient programming skills and strong knowledge in engine design, performance & operation; supported over 1000 world-wide internal/ external customers
• Provided project specific risk analysis and bidding strategies based on gas turbine performance variation and customer operating conditions variation
• Provided technical training on GE aero-derivative performance and application to new hires and customers
• Collected test data and developed a data reconciliation tool to analyze test data, which reduced test data uncertainty and significantly improved data analysis efficiency
• Invented an automatic optimization process for frame engine integrated tuning using Model-based Control, which led to more aggressive bids and thus improved competitiveness of gas turbine products; filed a patent application for this innovative process
• Created a data analysis tool to support frame engine Compressor Validation Rig test which automated the data analysis & validation process

Research Assistant

Georgia Institute of Technology - January 2005 to May 2010

Developed a novel method for ship cooling system control (Multiple Sectioned Bayesian Networks with Intelligent Multi-agent Based Control)
• The Bayesian Network was developed in Matlab by using an open source Bayes Network Toolbox named FullBNT. The control agent system was developed in Java by using an open source software framework named JADE. The Matlab model and the Java model were connected by utilizing JMatlink which is an open source Java package.
• The ship cooling system model was developed in Flowmaster.
• ModelCenter as an integration tool was used to connect the ship cooling system model to the Bayesian Network agent system model.

EDUCATION

M.S. in Industrial Engineering

Georgia Institute of Technology
2009 to 2010

Ph.D. in Aerospace Engineering

Georgia Institute of Technology
2005 to 2010

B.S. in Aerospace Engineering

Beijing University of Aeronautics & Astronautics - Beijing, CN
1997 to 2001

LINKS

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