Contact

www.linkedin.com/in/jayeeta-ghosh-450b341 (LinkedIn)

Top Skills

Data Mining
Machine Learning
Data Science

Certifications

NVIDIA DLI Instructor Certification
AWS Certified Machine Learning - Specialty
AWS Professional Services: Machine Learning on AWS (Classroom)
AWS Certified Solution Architect - Associate

Publications

Computational modeling of in vitro biological responses on polymethacrylate surfaces

Jayeeta Ghosh

Data Scientist at Amazon Web Services (AWS)
Irvine, California

Summary

• Seven years of experience in Data Science, Computational Modeling, AI and Advanced Analytics
• Strong experience creating and applying Supervised and Unsupervised Machine Learning including Regression, Classification and Clustering techniques; Linear and Hierarchical Regression Models (GLM, LMM), Neural Network (ANN, RBF), Random Forest (RF), Gradient Boosting (GBM, XGBoost), Classification and Regression Tree (CART), Decision Tree (DT), Logistic Regression; Kohonen, K-means, Expectation Maximization, Deep Learning (DL)
• Experience using Data Science, Machine Learning, Statistical Analysis in Life Insurance, Retail, Life Sciences, Health Care
• Proficient in computational and statistical tools such as R, Python, MySQL, C++ on LINUX/Unix and Windows, Git/GitHub
• Experience creating simple, intuitive and concise visualizations and EDA of client data and presenting to stakeholders using Tableau
• Excellent communication/presentation and interpersonal skills to communicate to non-technical audience

Experience

Amazon Web Services (AWS)
Data Scientist
September 2019 - Present (7 months)
Irvine, CA

Trace3
Senior Data Scientist
August 2017 - August 2019 (2 years 1 month)
Irvine, CA

• Build predictive models using Machine Learning and Deep Learning to optimize and solve client problems
• Provide consultancy services on Data Science related use-cases in manufacturing, retail, financial services

• Provide training to professionals on using Machine Learning / Deep Learning - DLI instructor for Computer Vision, Natural Language Processing, Multiple Data Types, Multiple GPUs

QuaEra Insights
Data Scientist
June 2015 - June 2017 (2 years 1 month)

• Developed machine learning models for Fortune 100 client in Life Insurance using Logistic Regression, Random Forest (RF), Generalized Linear Model (GLM), and Bayesian Markov Chain Monte Carlo (MCMC) using R/Python
• Worked with Data Engineers and Technology team members to extract data from multiple data sources e.g Hadoop, SQL server on wide variety of client information and cleaned up the data before using in model building process
• Analyzed, designed, developed and deployed machine learning models and platform for life expectation/mortality index using Hierarchical Mixed Regression Models using R/Python
• Worked with Tableau for exploratory data analysis and providing business solutions as part of model delivery for clients
• Provided technical input, guidance, and business needs to internal cross disciplinary team members

Simulations Plus, Inc.
Senior Scientist
August 2012 - June 2015 (2 years 11 months)

• Researched and built Artificial Neural Network Ensemble (ANNE), Regression and Classification models for physical and biochemical properties of potential drug candidates using state-of-the-art Cheminformatics software
• Extensively used Regression Analysis (MLR, KPLS), Classification Analysis (SVM), ANN, Cluster Analysis (Kohonen, K-means), Sensitivity Analysis (IG, TLA, GA), Principal Component Analysis on compounds for Virtual Screening
• Collected data from literature (.xls, .cvs, .pdf) and applied extensive data cleaning and curation prior to Model building

PMAAG
Research Consultant
May 2011 - August 2012 (1 year 4 months)
Irvine

• Researched and built Predictive models in Healthcare industries on health care data to build models for patient outcome. Analyzed existing vital data and used statistical models to enable organizations solve problems and maximize

decision effectiveness by examining alternative outcomes and scenarios using WEKA, R, SQL Server

UC Irvine
Lecturer
August 2011 - 2012 (1 year)
Irvine, CA

Taught General Chemistry and Introductory Computational Chemistry courses using Mathematica.

National Center for Supercomputing Applications
Research Associate
July 2010 - February 2011 (8 months)

• Developed Cyber Infrastructure and integration of workflow for Parameter Optimization (Force Field) of drug-like molecules for use in Virtual Screening using MySQL, Java, Perl, Web Services

NJCBM-Rutgers
Post Doctoral Fellow
July 2008 - June 2010 (2 years)
Piscataway, NJ

• Extensively used computational techniques for Advanced Cheminformatics problems of large Combinatorial Library of Polymeric Biomaterials, and Transdermal Drug delivery through Molecular Dynamics modeling of Skin Lipid bilayers
• Developed cutting edge Data Mining and Machine Learning tools for QSPR Multivariate techniques including Cluster Analysis, Decision Tree, Principle Component Analysis, and Artificial Neural Network
• Analyzed data for Molecular Modeling using C/C++, WEKA and MySQL

UC Davis
Graduate Student
2003 - 2008 (5 years)
Davis, CA

• Extensively used Computational Chemistry packages for Advanced Molecular simulations including techniques such as Molecular Dynamics, Monte Carlo, and Multi-scale Modeling on local cluster and Supercomputers
• Designed and characterized Multi-scale models for Glass former molecules and analyzed simulation data

• Developed computer code for a molecular model of glass former using C++ and scripting languages

Education

University of California, Davis

PhD, Computational Chemistry (Chemical Engineering)

University of California, Davis

MS, Chemical Engineering

University of Calcutta

BS, Chemical Engineering