Exciting career opportunities @ Wells Fargo

What do we do?
• State-of-the-art statistical and mathematical model development
• Modern Machine Learning, NLP, and AI techniques
• Big data analytics and use of advanced computing environments

Why choose Wells Fargo?
• Large quantitative community
• Diverse and inclusive workforce
• Mentoring and opportunities for career growth
• Great Locations: Charlotte, San Francisco, NY, Minneapolis, Atlanta

Modeling and prediction
• **Credit Risk**: Future losses from customers not repaying debts or loans
• **Market Risk**: Impact of changes in market prices; Pricing derivatives and extreme exposure to market risk
• **Counterparty Risk**: Potential loss from defaulting on contractual obligations by other parties: investment, trading, transaction
• **Revenue and Expenses**
• **Asset and Liability Management**: Sensitivities to market environments; forecast net interest income, produce yield, and scenario analyses
• **Financial Crimes**: Fraud, money laundering
• **Fair Lending**: Ensuring fair treatment of customers and following regulations
• **Operational Risk**: Potential loss (including legal) due to failures in process, systems, or people
• **Text, voice and image data**: Complaints, e-mails, voice messages, chatbots for assisting customers and employees

Statistical and econometric techniques
• Exploratory analysis
• Dimension reduction; clustering, etc.
• Classification; Regression; Generalized linear models
• Variable selection for big data
• Survival analysis
• Time series forecasting
• Semi- and non-parametric methods: splines, loess, etc.
• Regularization: Lasso, Ridge, Elastic Net

Traditional mathematical techniques
• Numerically solving PDEs and SPDEs
• High-dimensional Monte Carlo

Use of ML/AI techniques
• Data mining and anomaly detection
• Autoencoders
• SVM; Random Forests; Gradient Boosting
• Neural Networks for prediction
• GANs
• Deep Learning to solve backward SPDEs
• Natural language processing