

# **About OptiFunder**

OptiFunder is an innovative FinTech company and pioneer of the Warehouse Management System for residential mortgage originators. OptiFunder leverages machine learning, patented optimization algorithms and RPA to optimize and automate the use of short-term funding facilities for independent (non-bank) mortgage companies. We ensure each loan is funded with the lowest cost to the originator, and we show measurable results on day one.

Our team is high performing and extremely collaborative. We are committed to our clients and invested in the outcome of our work together. We are a B2B SaaS provider with deep expertise in finance, data science, solution architecture and CX. As a funded start-up, we are moving quickly and inviting team members with energy and initiative. If you're interested in growing with us, we want to hear from you.

#### **Job Description**

OptiFunder is looking for a Senior Data Scientist with deep knowledge and experience in Machine Learning, Predictive Analytics, and Optimization algorithms. This role is responsible for scaling, enhancing and maintaining existing models within OptiFunder Select<sup>®</sup>.

He or she will lead end-to-end execution of our data science efforts, driving development of deep analytical methodologies, from hypothesis development to scaled production.

The ideal candidate will be passionate about exploring and leading development and implementation of advanced analytics capabilities, including predictive analytics, cognitive technology, ML/AI, and automation. Role requires continuous and relentless learning to stay updated to latest industry and analytics trends.

#### **Essential Functions**

- Serve as the head of all data science for the Company which include machine learning models and optimization solvers
- Help define data science modeling strategy and manage pipeline for modeling efforts
- Deliver data science solutions to drive customer, operational, and financial-focused insights aimed at top and bottom-line business value
- Lead projects from initial idea to production deployment, with full analysis of the tradeoffs required
- Build data models using Python
- Act as an industry subject matter expert with focus on making sure OptiFunder remains a thought leader in mortgage analytics
- Interrogate analytical results for robustness, validity, and out of sample stability; build exposure to error handling and recovery strategies
- Deliver complex quantitative analyses in a clear, concise and actionable manner to stakeholders
- Provide technical leadership & expertise across multiple modeling projects
- Influence decision making through analytical insights



#### **Skills and Experience**

- Graduate degree level in Computer Science, Statistics, Applied Mathematics, Software Engineering, Data Science or a related discipline, or equivalent work experience
- 6+ years of progressive experience building and validating predictive models on structured and/or unstructured data
- Experience applying the following methods in real world applications: univariate and bivariate statistics, association methods including but not limited to GRI & CARMA, CART, CHAID, bagged and boosted decision trees, linear regression, logistic regression, Bayesian modeling, neural networks, times series analysis including but not limited to Box-Jenkin, Support Vector Machines, survival analysis, K-nearest neighbors
- Experience in data wrangling and various cluster techniques in real world business applications, including k-means, factorial analysis, discriminate analysis
- A strong mathematical and analytical background, specifically in linear algebra, dynamical systems and optimization
- Demonstrated proficiency in building data models using Python, R, or other statistical and/or mathematical programming packages
- Deep experience with open source solvers and commercial solvers such as Gurobi and CPLEX
- Subject matter expertise in predictive modeling, including comprehension of theory, modeling strategies and limitations and pitfalls
- Experience working within an agile, continuous integration environment
- Self-motivated and capable of working independently but with a collaborative nature.
- Proficient with the following: SQL, Pandas, NumPy, SciPy, Scikit-learn, Jupyter Notebooks
- Demonstrates basic understanding of software development best practices (version control, code documentation & review, and database management)

# **Desired Skills**

- Doctoral level education preferred
- Working knowledge and experience with cloud-based technologies, preferably GCP
- Prior experience in FinTech or financial services strongly preferred
- Experience working with start-ups a plus

#### Mindset

- Effective Communicator: Ability to communicate concisely and accurately across an entire organization, ranging from upper management to field personnel. Can communicate purpose and usage of difficult mathematical concepts and algorithms for a wide audience so that they can understand.
- Growth Mindset: Proven ability to quickly learn new concepts, processes, software, engineering and mathematical ideas. Committed to professional development with focus on data science continuum and state-of-the art technologies.
- *Empathetic and Customer-focused*: Effective listener who builds products that solves customers' problems, generates business value, and enhances user experience.



- Resilient: Ability to deal with open-ended data-related problems, and to gain valuable insights from data sets that may be initially unwieldy. Must be able to effectively clean data sets to perform analysis and predictive analytics work.
- Creative Problem Solver: Able to come up with unusual or clever ideas about a given topic or situation, or to develop creative ways to frame or solve a problem.

# **Travel Requirements**

This position may travel up to 10 percent, working out of our corporate headquarters in St. Louis and traveling to client and partner sites.

# **Reporting Relationships**

Reports to the CTO; has no direct reports assigned.

LOCATION St. Louis, MO Job Type: Full-time

We are an equal opportunity employer. All qualified applicants will receive consideration for employment without regard to any protected class status.

Send inquiries to careers@optifunder.com