Artificial Intelligence (AI) Engineer, gRED Early Clinical Development

Job ID: 201810-125082

Job Function
Modelling & Simulation

Schedule
Full time

Location
United States of America - California
South San Francisco

Job type
Regular

Company/Division
Pharmaceuticals

Job Level
Individual contributor

The Position

Genentech's Early Clinical Development (ECD) department is seeking an Artificial Intelligence (AI) Engineer reporting to the AI Team Lead. The ECD AI group impacts Clinical Operations in trial design, planning and predictive tools. The role will require cross-functional interactions with early research in discovery chemistry (CADD) and DMPK. The AI Engineer will act as a consultant and be required to both establish and apply new AI methods to specific problem domains within those functions.

The AI Engineer will primarily be responsible for the development and the deployment of deep learning methods in early research with particular focus on the application to early discovery chemistry. The main method will be a generative method for proposing small molecule with desirable predicted properties. The position will also apply AI methods to modeling in the DMPK and early discovery chemistry.

Responsibilities

- Lead key AI pilots to ensure successful completion and develop plans to integrate capabilities into the normal early clinical development process
- Development of new and novel Deep learning methods for reinforcement learning and generative methods
- Application of deep learning methods to problems and support in early discovery and research with particular application to small molecule chemistry
- Develop the software tools and library for application of deep learning methods, and train other colleagues within gRED and cross-Roche to develop and use the tools in their applications
- Development of deep learning methods for adverse event prediction

- Possess in-depth knowledge of multiple real-world data assets and share information about these data to business partners and the ECDi team.

Qualifications

- Experience (7+ years) and a proven track record in software engineering, must have public and private repositories and track record of contribution to an open source package, such as DeepChem
- Python, Tensorflow, Scikit Learn, C++ PyTorch, DeepChem,
- Strong analytical and problem-solving skills
- Excellent oral and written communication skills
- Ability to lead cross functional multi-disciplinary teams
- Able to work in teams and collaborate with others to solve the most challenging business problems
- OEChem, RDKit, SPARQL, and SQL are a plus

Education

- Phd in Artificial Intelligence and machine learning with particular emphasis on molecular property prediction

#LI-GREDKM2

Who We Are

A member of the Roche Group, Genentech has been at the forefront of the biotechnology industry for more than 40 years, using human genetic information to develop novel medicines for serious and life-threatening diseases. Genentech has multiple therapies on the market for cancer & other serious illnesses. Please take this opportunity to learn about Genentech where we believe that our employees are our most important asset & are dedicated to remaining a great place to work.

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