Igor Putrenko

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OBJECTIVE

Experienced analyst / scientist with an appetite for data is interested in an analytics role focused on translating data into insights that will maximize profit, decision-making, and productivity through querying, exploratory and statistical data analysis, data mining, and machine learning

TECHNICAL SKILLS / TOOLS

PROGRAMMING: Python, SQL / T-SQL, R, PowerShell (.NET)
TOOLS: Pandas, Matplotlib, Numpy, Scipy, Scikit-learn, Seaborn, Tableau, Hadoop, Flask, GitHub, Bash
MACHINE LEARNING (ML): regression, classification, clustering, dimension reduction, NLP, time series analysis
DATABASE MANAGEMENT SYSTEMS: MS SQL Server (administration, development, and BI), PostgreSQL

EXPERIENCE

DATA SCIENCE FELLOW AT INSIGHT HEALTH DATA SCIENCE PROGRAM (SAN FRANCISCO) **SEP 2017 – PRESENT**

Participated in the professional development fellowship, completed and presented a consulting project

- Extracted, cleaned and analyzed 28 million patient records from MIMIC-III clinical database using SQL and Python
- Developed a random forest predictive model for improving the diagnostics of cardiovascular diseases (CVD)
- Developed a SQL Server database containing CVD patients data extracted from MIMIC-III database

INDEPENDENT CONTRACTOR (BURNABY, CANADA) **2015 – 2017**

Provided consulting services in business data and systems analysis as well as technical support to clients in biotechnology, medical diagnostics, IT, HR and finance industries

- Applied ML algorithms using Python to gain insight into lab reagent sales: clustered customers using affinity propagation and developed a gradient boosting classification model to predict their purchasing behavior
- Analyzed business process, described user cases and designed a pharmacy stock management system for optimizing online ordering by community pharmacies
- Improved the end-user experience by resolving licensing, hardware, system / software, and networking issues

RESEARCH ASSOCIATE AT THE UNIVERSITY OF BRITISH COLUMBIA (VANCOUVER, CANADA**)** **2008 – 2015**

Planned and conducted electrophysiology (EP) research to identify and validate neuronal ion channel targets for the treatment of chronic pain and epilepsy

- Applied time series analysis using ORIGIN to identify ion channel conductances responsible for drug-induced changes in electrical signaling of brain neurons
- Performed statistical analysis on data collected to test the significance of drug effects
- Developed linear and nonlinear regression models to describe drug-induced changes in neuronal membranes
- Built logistic regression models to estimate drug dose-response relationships

RESEARCH SCIENTIST AT NEUROMED PHARMACEUTICALS (VANCOUVER, CANADA) **2005 – 2008**

Participated as an electrophysiologist in R&D projects focused on the discovery of novel drugs blocking neuronal calcium channels for the treatment of neurological diseases such as pain and anxiety

- Designed and validated EP screening assays for identifying ion channel blockers using automated platforms
- Developed linear and logistic regression models using ORIGIN to determine the mechanisms of drug action
- Performed statistical analysis and built logistic regression models to test drug candidate efficacy and efficiency

EDUCATION

- **Ph.D., BIOCHEMISTRY,** INSTITUTE OF BASIC BIOLOGICAL PROBLEMS, RAS (RUSSIA)
- **B.Sc., BIOPHYSICS,** VORONEZH STATE UNIVERSITY (VORONEZH, RUSSIA)
- **CERTIFICATE, APPLIED DATABASE AND NETWORK ADMINISTRATION,** BCIT (VANCOUVER, CANADA)