

## 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 use 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)