GURPREET **SINGH**

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https://gur-p-reet.github.io/portfolio/
https://github.com/gur-p-reet/
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TECHNICAL SKILLS

Languages: *SQL, Python, Java, JOGL, HTML, CSS, JavaScript, Fortran, SAS programming, Latex*

Frameworks/Libraries: *Pandas, Scikit-Learn, Numpy, Matplotlib, Seaborn, TensorFlow (Keras), ReactJS, ExpressJS, Node.js, NPM, PostgreSQL, Docker*

Other: *PowerBI, Oracle SQL Developer, SSMS, Tableau, MS Excel, MS Office, Git/GitHub, AWS, Google Cloud Computing (GCP), Linux*

EDUCATION

M. Sc. (Computer Science)– University of Northern British Columbia — Prince George, BC | *Sept 2016-April 2019*

Ph. D. (Physics-Computational Chemistry)– Panjab University — Chandigarh, India | *July 2010-Nov 2015*

WORK EXPERIENCE

ZE PowerGroup Inc. – Business Analyst — Richmond, BC| *June 2022-Present*

- Provided technical and operational support for ZEMA users, and analyzed/troubleshoot related issues.
- Actively involved in data extraction, cleaning and update/modify SQL scripts, and ensured the data flow cycle work properly.
- Utilized Python, Power BI, MS Excel, Oracle SQL Developer, etc. tools to analyze data/trends, data reconciliation and business decision making.

ZE PowerGroup Inc. – IT Support Analyst — Richmond, BC| *April 2021-May 2022*

- Managed Active Directory administration, MS Exchange, MS Office and resolved different end user issues.
- Provided support to different admin portals (Office 365, JIRA, etc.) and other data solution tools.
- Maintained reports and ensured inventory requirements met accurately on time with the appropriate quantities.

University of Northern British Columbia – Teaching Assistant — Prince George, BC| *Sept 2016-Dec 2018*

- Delivered instructions to meet course objectives and accessed students' performance/grades.
- Provided project guidance and motivation for students to complete their project within the given deadline.
- Participated in professional development activities and worked closely with other instructors and staff.

Drish InfoTech Ltd. – Business Analyst — Chandigarh, India | *July 2015-Feb 2016*

- Designed database, perform SQL queries and develop procedures.
- Understood client requirements and worked closely with other teams to improve the quality of the service.

Raman Laboratory, Panjab University–Research Assistant — Chandigarh, India | *July 2011-June 2015*

- Collected, cleaned and structured the data from different experiments (MS Excel, Spekwin, Linux-Vim).
- Optimized the Quantum Chemical Model predictions via hyperparameters tuning.
- Employed different statistical techniques and tools to study patterns, correlations and evaluation metrics.
- Published new findings in different conferences/symposia and scientific journals (Latex).

Chandigarh College of Eng. and Tech.– Web Developer — Chandigarh, India | *July 2010-April 2011*

- Maintained and updated college website (HTML, CSS, JavaScript).
- Designed web forms for online applications. Updated College website with scientific facilities/events.

Cyclotron Laboratory, Panjab University– Research Assistant — Chandigarh, India | *Aug 2008-June 2010*

- Collected and cleaned data from heavy-ion fusion experiments at IUAC, New Delhi, India.
- Analyzed experimental data and compared results with model predictions (statistical and dynamical models).

MAJOR PROJECTS

Employee Attrition- Data Analysis and ML Modelling

- Performed data cleaning, transformation, analysis using different Python libraries and statistical methods.
- Build models based on RandomForestClassifier, Logistic regression and Tensorflow and summarized results.

Smart Sense-Web Application

- Developed the front end using React library. Utilized Node.js, Express.js and PostgreSQL for back-end development.
- Deployed the application on Heroku and linked the application with Clarifai API for face detection.

Protein Structure Optimizer-Java Application

- Developed an interactive user interface using Java and JOGL with multiple input/ output/analysis options.
- Implemented meta-heuristic optimization algorithms and on-demand hybridization among algorithms.

RESEARCH PUBLICATIONS

Six research publications in different scientific journals and fourteen publications in conference/workshops/symposia.