**Full Stack Developer**

**Professional engineer with great passion for coding and solving business problems**

**Summary**

Continuous learner and problem solver with a background in both academia and industry. Qualified full stack developer with experience in developing both frontend and backend components. Knowledge of JavaScript framework, distributed version control system, MongoDB and MySQL database systems. Experienced in agile software development environments. Able to work as a good team player in a fast-paced and high-demand environment.

**Technical Skills:**

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| --- | --- | --- |
| * JavaScript * CSS * HTML * Python * Algorithm and Data Structure * MapBox * Trello | * React.js * Express.js * Node.js * React Native * MUI * React Bootstrap * Chart.js * Zoom | * MongoDB * Firebase * MySQL * Auth0 * Git * GitHub * Heroku * Discord |

**Professional Experience**

**Full Stack Developer**

**InceptionU Ltd**., Calgary, AB February 2022 – July 2022

* Trained on fundamentals of algorithms and data structure and the latest full stack (frontend and backend) development technologies.
* Engaged in project-based learning and training on mindsets of critical thinking, systems thinking, creative thinking, and computational thinking.
* Developed functional and interactive full stack applications using JavaScript, main MERN stack (MongoDB, Express.js, React, Node.js), and other libraries and frameworks.

Project 1: Created a text-based interactive game “Guess Weather”. Players guess the weather of different cities. The game can compare the players’ guesses with real-time weather data fetched from a third-party REST API and saved the game results in MongoDB.

Project 2: Leaded the team to develop a fully functional and responsive web application “AlterCarbon”. Users can use the application to calculate and track personal/household carbon footprints based on energy consumption, monitor CO2 emissions of the City of Calgary’s facilities on a map, and perform calculation for offsetting carbon emissions.

Project 3: Created a full stack application “I Am Here” within an agile software development team. “I Am Here” is a platform connecting newcomers with volunteers. By using the application, volunteers can post their availabilities, manage schedules, and chat with newcomers. Newcomers can easily access the accommodation, translation, and transportation services provided by volunteers.

**Petroleum Engineer**

**Exceed (Canada) Oilfield Equipment Inc**., Calgary,AB 2020–2021

* Conducted R&D on projects of inflow control devices (ICDs), vacuum insulated tubing (VIT) heat transfer, and thermal wellhead for thermal production wells.
* Coordinated products production and managed logistics operations, including planning and tracking both ocean shipping and inland transportation, monitoring inventory as well as warehouse, and acquiring/purchasing materials and/or services.
* Collaborated with sales and accounting departments in project bidding, promoting products, and providing consulting to oil and gas companies.

**Postdoctoral Associate**

**University of Calgary**, Calgary, AB 2018–2019

* Conducted research to investigate the application of nanoparticle stabilized foam as fracturing fluids for unlocking unconventional reservoirs.
* Applied financial policies and best practice to request quotations, purchase laboratory materials and services, and maintain laboratory equipment.
* Developed research proposals and reports, presented research findings to colleagues and industrial professionals, and taught undergraduate students.

**Research Associate**

**University of Regina**, Regina, SK 2016–2017

* Developed project proposals to secure NSERC Collaborative Research and Development (CRD) Grants, Discovery Grants, and fundings provided by industrial partners.
* Leaded research project on enhanced oil recovery (EOR) techniques with nanoparticles and low-salinity water for improving heavy oil recovery.
* Managed research laboratory, assisted supervisor in instructing both graduate and undergraduate students, and promoted collaborations with international scholars.

**Education**

**Doctor of Philosophy, Petroleum Systems Engineering**

University of Regina, Regina, SK 2012–2016

**Master of Applied Science, Petroleum Systems Engineering**

University of Regina, Regina, SK2010–2012

**Bachelor of Engineering, Petroleum Engineering**

China University of Petroleum, China 2004–2008

**Memberships & Professional Development**

* P.Eng., Association of Professional Engineers and Geoscientists of Alberta (APEGA)
* Library Association of Alberta
* Society of Petroleum Engineers (SPE)