

Amardeep Singh

+1 6475549475 | amardeeps5201@gmail.com

[Linkedin.com/in/amardeep-s-70a471a3](https://www.linkedin.com/in/amardeep-s-70a471a3) | [Github.com/AmDeep](https://github.com/AmDeep)

EDUCATION

MSc. Eng. Chemical Engineering & Applied Chemistry, University of Toronto, Toronto- Canada **01/2019 – 01/2021**

- [First Place](#), Hatchery Startup Program, **University Of Toronto**: Won first place in funding(CAD 20,000) for a hackathon inspired project on automating legal drafting procedures.
- First place at RBC SA&I Case Comp, **RBC**: Awarded first place(CAD 6,000) for pitching ideas about greener shopping alternatives.
- Best Design At Innovation Showcase Student Hackathon, **NPX Innovation**

BSc. Eng. Birla Institute of Technology & Science, Pilani, Dubai Campus, Dubai- UAE

09/2014 – 09/2018

WORK EXPERIENCE

ML/AI/Bioinformatics Researcher, Ultraceuticals, Virtual,
Present

06/2022 –

- Researching and drafting advanced methods related to drug design, docking procedures and chemical species.
- Streamlining code modules through Python, C++, Shell and Jupyter for performing drug design simulations.
- Documentation and strategizing for code modules intertwined with chemical, biological computational packages.

Chemical Engineering Intern, Student Energy, Virtual,

02/2022 – Present

- Researching calculation methods for engineering modules associated with piping, oil and gas, equipment.
- Energy level accounting, assessment of client data related to pressure and temperature.
- Documentation and simulation of heuristic level changes to company processes through engineering tools.

Software Engineering Intern, Dialoggbox, Virtual,

06/2021 – 09/2021

- Building computer vision models using AWS Sagemaker and OpenCV, improving accuracies for speaker and non speaker detection by 27% from baseline performance.
- Data cleaning, parsing, training and testing with sample videos generated from public fair use resources.
- Designing and documenting methodologies for speaker detection in videos, including test cases for automated facial marker recognition and video frames.

Machine Learning Engineer, Lambda Function, Virtual

01/2021 – Current

- Processing machining data and sensor datasets from clients through S3 buckets and modular notebooks on Jupyter.
- Building anomaly detection models and deploying predictive maintenance algorithms through Python, Streamlit and AWS.
- Defining baselines, visualising time stamps results in real time; researching on root cause analysis of potential breakdowns through automated techniques.

AI Consultant, Deepgram, Virtual

11/2020 – Current

- Building language models for automated speech recognition related to Hindi and Devanagari scripts in Linux and Python based environments.
- Data cleaning, model tuning and visualisation for improving accuracies through in house packages built through Python.
- Conducting audio analysis and natural language processing for sample datasets, improving accuracies better than conventional Google speech models.

Work Study Student, University of Toronto, Toronto

06/2020 – 12/2020

- Building automated macros for assisting VPRI team with analysing attendee and researcher datasets through Excel and VBA.
- Conducting experiments through R and Python for visualising and generating network graphs related to researchers in multiple domains.

- Creating automation scripts to clean and parse through large amounts of survey and feedback datasets.

COURSES

[Udacity AI Product Manager](#), 2021-2021

[Microsoft Azure AI Nanodegree](#), Udacity, 2020– 2021

[AWS Machine Learning Nanodegree](#), Udacity, 2020 – 2020

PROJECTS

Designing a machine learning enhanced solution for predicting drug related responses in pharmaco-chemical activity, [Github Link](#) (11/2020 – 02/2021)

Developing a time series predictive maintenance model for studying machine health and reliability metrics in failure responses, [Github Link](#) (08/2020 – 10/2020)

Determination of the relations between term deposit payments and direct marketing campaigns, [Rpubs Link](#) (01/2018-04/2018)

ORGANIZATIONS

University Consulting Group, Student Consultant, (09/2021 – Current)

MZZ Asia, Consultant, (07/2021 – Current)

UTESCA, Student Consultant, (09/2021 – Current)

University of Toronto, Consulting Association, Pro-Bono Consultant, (09/2021 – Current)

Student Energy Leaders Fellowship, Cohort Member, Toronto- Canada, (01/2021 – Current)

Amazon, AWS Community Builder, Virtual, (10/2020 – Current)

IBM, ZAmbassador, Toronto- Canada, (03/2020 – 05/2021)

Omdena AI, ML Engineer & Project Manager, Virtual, (01/2020 – Current)

SKILLS

Microsoft Power BI, SQL, JAVA Netbeans, R, Python, SPSS, Docker, Microsoft Azure, AWS, VBA, C++, HTML, Javascript, MATLAB, WEKA