CHANPREET SINGH

TECHNICAL SKILLS

- Web Technologies: HTML, CSS, AJAX, JavaScript, PHP, Bootstrap, SEO
- **Database**: SQL, CSV, Big data, Google Cloud Platform, AWS, MySQL, MS Excel, MS Access, Tableau, Google Data Studio, Adobe Analytics, Adobe Targets, Google analytics, Google Search Console, Google Tag Manager
- **Software Tools:** Teradata SQL, XAMPP, RStudio, Android Studio, MS Office, Jupiter Notebook, Adobe Photoshop, Word Press, GitHub, Asana, Slack, HubSpot, CRM, Trello, Moz, CMS, Datorama, site search 360
- Logical Programming skills: C, C++, Arduino, Java, basic concepts of C#, Bash, R, Python
- ML Frameworks: NLTK, Pandas, NumPy, TensorFlow, Sklearn, Matplotlib, GeoPy, Seaborn, SciPy, Scikit-learn

PROJECTS AND TRAINING EXPERIENCE

Digital Analytics Associate Manager, Wurth Canada

- Inform digital strategy, website development and digital technology investments through analytics and data science
- Work closely with business partners to uncover powerful insights from a variety of big data sources using advanced tools, methodologies and algorithms
- Utilize online and offline data to understand digital performance in context of the overall business
- Profile and segment digital customers, analyze purchase behavior and functionality usage through digital channels
- Manage projects associated with Adobe analytics, Adobe campaigns implementation
- Build performance dashboard, define KPI's, create calculated metrics, dimensions in Adobe analytics for business reporting to stakeholders
- Analyze opportunities and customer trends in the digital marketplace
- Seek to drive profitable investments through the unbiased evaluation of financial impact of technology and digital marketing investments

Data Analyst, Bell Canada

- Perform exploratory data analysis on data from the customer self-serve portal (Bell Business Market)
- Build Dashboards using Teradata, Matomo, MS-Excel, MicroStrategy and other tools to help derive data-driven decisions
- Perform testing and validation of customer requests pipeline from self-serve centre to Smart-Path and analyze the results in Matomo testing environment
- Create tags, triggers, variables, and regular expressions to track user interactions on website
- Build Goal-Campaigns, Process-Funnels, Heatmaps and Forms to attain specific results such as KPI's for user engagement, time spent, drop rate, conversion rate etc.

Digital Main Street-Web Developer, Invest Ottawa

- Meet with clients and team leads to identify the needs and design of a website
- Create and test applications for a website
- Write code for websites and Develop dynamic and responsive web pages
- Work with UX/UI and graphic designer to develop mockups and execute on the user experience design plan

(May 2021- Sept 2022)

(Aug 2020- May 2021)

(Sept 2022-Nov 2022)

- Work with team to identify and add information and content onto the site including graphics, audio, and video
- Working with web content writing and Implementing search engine optimization (SEO)
- Edit and fix company websites to combat bugs and small errors
- Working with team to Develop Strategies for social marketing campaigns
- Manage projects-communicate and collaborate with supervisor and other designers and writers
- Working with Google Business Solutions including setting up Google My Business profile, Google Analytics, Google Search Console, Google AdWords and Google Merchant Centre
- Provide training and useful resources to newly hired Web Developers ٠

Master's Thesis-Research and Analysis, CU

- Developed a unique machine learning model for studying and predicting depression in users on social media using various data analysis concepts
- Originated real-time Twitter data mining using **Twint** Tool and **Tweepy** (Python library)
- Instigated detailed research reviews for more than 20 existing published papers •
- Implemented Topic Modeling, GloVe embeddings, Word2Vec, TF-IDF, Natural Language Processing, NLTK, Sentiment Analysis, Random Forest, Logistic Regression, SVM, XGBoost, Adaboost, Gradient Boost, LSTM, Bi-LSTM, Recurrent Neural Networks
- Accomplished highest accuracy compared to existing researches under Support Vector Machine by 98.14% using sentiment analysis on Word2Vec and TF-IDF within the tweets
- Attained utmost accuracy among existing researches under Gradient Boosting by 95.26% using **12 unique attributes** by extensive feature engineering, Lexical features of vocabulary, and extraction of emotion from the text with User Level approach.
- Performed data visualization, data cleaning, matrix transformation functions, computation of confusion matrix for each algorithm's performance using various metrics in detail, K-FOLD cross-validation as well as time complexity

Machine Learning Classification Research, CU

- Airline Sentiment Analysis in Python
- Executed Data Visualization, Association Rule Mining, Clustering and K-Fold Testing
- Performed Naïve-Bayes, ANN, Support Vector Machine, Stochastic Gradient Descent, Random Forest, K-Nearest Neighbors, Logistic Regression, and Perceptron
- Improved time complexity of the model and achieved the highest accuracy using Artificial Neural Networks by 94.21%

Data Analytics Predictive Model, CU

- Income Prediction Analysis in **R** programming
- Conducted more than 15 existing research reviews related to the topic
- Achieved highest accuracy compared to existing researches using **Gradient Boosting** by **89%**

Human-Computer Interaction, CU

- Devised a women's wearable safety device prototype with 2 different input modes •
- Performed research, analysis, design, **Arduino** programming, as well as ethics certification for • research involving humans along with conduction of market survey testing and debugging

Customer Churn Analysis in R programming, CU

- Programmed **EDA**, Data Cleaning, preprocessing and enhanced feature engineering
- Built Logistic Regression, GBM, DNN, and Random Forest (Bagging)
- Pioneered accuracy and streamlined processes using Deep Neural Networks by 84%

(May 2019-June 2020)

(Jan 2019-April 2019)

(Sept 2018-Dec 2018)

(Jan 2019-April 2019)

(May 2019-Aug 2019)

Android Development - City Tour Guide App

@ (SPIC) Society for Promotion of IT in Chandigarh, India

- Developed and modified software modules in collaboration with a team of 4 using Scrum/Agile methodology
- Implemented Java, JSON for development, XML for designing, and PHP for interconnecting MySQL database using XAMPP
- Revamped user interface for better interaction experience, devised a smart tour planning guide, as well as expedited route information using real-time location coordinates

Web Development Training

@ Trigbit Technologies, Ludhiana, Punjab, India

- Designed dynamic serving E-Commerce shopping website
- Spearheaded front-end development using **Javascript**, **jQuery** and **HTML5**, design using **CSS3** and **Bootstrap**, back end coding using **PHP**, **AJAX**, **MySQL**, and PayPal sandbox
- Implemented Software Development Lifecycle (SDLC)

Certificate course of C/C++

@ Alpha Tech Computers, Ludhiana, Punjab, India

- Drafted programming syntax and developed code structure for application development
- Reconstructed Logistics to solve problems using **C** and **C++** programming languages
- Intermediate Proficiency in Object Oriented Programming (OOPs) concept

EDUCATION

Carleton University (CU), Ottawa, ON, Canada

• Master of Information Technology (MIT): Digital Media specialization in Data Science

Guru Nanak Dev Engineering College, Ldh., Punjab, India

• Bachelor of Technology (B.Tech.): Information Technology

VOLUNTEER EXPERIENCE

- Volunteer Council Member in Graduate Students' Association (G.S.A), Carleton University
- Volunteer administrator in International Student Services Office (ISSO), Carleton University
- Planned and organized various social welfare events such as blood donation, planting trees and successfully raised funds and amenities for underprivileged
- Volunteer Data science lecturer at Government senior secondary school, Sidhwan Kalan, Ludhiana, Punjab, India (Feb 2023-March 2023)

EXTRA-CURRICULAR ACTIVITIE S

- Training skills in software like Virtual DJ Pro, Turntables Sound Mix Studio
- Video Visual Effects (VFX) and graphics software like Final Cut Pro
- Professional photo editing, Graphics & Logo Designing using Adobe Photoshop CS6+
- Social Media blogger (20k followers), Singing, Cooking, Photography, Travelling, & playing Chess

(July 2016-Jan 2017)

(June 2014-July 2014)

(June 2015-Aug 2015)

(May 2013-May 2017)

(Sept 2018-June 2020)