Karan Singla

Address: 2984 Donnelly Street,
Windsor, ON N9C 1L8
Phone: 519-977-2706

Website: https://karansingla.com
Email: singlak@uwindsor.ca
LinkedIn: linkedin.com/in/karan-singla/
Github: github.com/karansingla06/

SUMMARY OF SKILLS AND EXPERIENCE

- **2.5+ years of full-time Software Development** experience, including 1.5 years in Artificial Intelligence
- Languages: Python (Django, Falcon), Java, C++, HTML/ CSS
- ML/AI Libraries: Scikit-learn, Pandas, Matplotlib, Numpy, TensorFlow, Spark, NLTK
- Databases: MongoDB, MySQL
- Process and Tools: MS Azure Devops, version control using GIT, Scrum and Agile development methodologies

EDUCATION

Master of Applied Computing at University of Windsor (UoW) with **GPA: 91**   2019 - Present

Bachelor's in Computer Science from JIIT, Noida, India   2013 - 17

WORK EXPERIENCE

Senior Software Developer at UST Global   Mar 18 - Jul 19

Intelligent Computing Environment (ICE): UST's Natural Language Processing (NLP) platform.
- Microservices based pipeline for text mining, named entity recognition, predictive modeling
- Took ownership of backend (API Design and Development)
- Database Design, Code Reviews, Client Management, Collaboration with design teams, CI/CD

Anthem Virtual Assistant (Proof of Concept): A chat-bot for the healthcare giant Anthem to answer user queries regarding insurance plan & coverage details.
- Parsed PDF insurance documents to HTML to extract relevant coverage data by sections
- Used Natural Language Processing to answer user queries with relevant information

Software Engineer at Infosys   Jul 17 - Mar 18

Applications Migration to Azure Cloud
- Provided infrastructure, virtualization service on cloud MS Azure
- Deploying apps on virtual machines and testing after migration

Software Engineer Student Intern at Infosys   Jan 17- May 17

Web Developer Summer Intern at Tnine Infotech   Jun 16 - Jul 16

ACADEMIC AND PERSONAL PROJECTS

Admin Controlled Chatbot using Chat: An admin controlled chatbot where admin can make any changes to the bot through chatting and interaction
- Used IBM Watson for creating the intents, entities, dialog flows for the bot
- Implemented REST APIs (Django) endpoints for the application
- Application Deployment using cloud Azure App service.
- https://github.com/karansingla06/Admin-Controlled-VISA-Chatbot

References available upon request

YouTube Statistical Data Analysis: Analysis done on YouTube trending videos, and COVID-19 videos.
- COVID-19 related data mining using YouTube Data v3 API
- Data Cleaning, Processing and Visualization using Apache Spark, Pandas, Matplotlib, Seaborn
- https://github.com/karansingla06/YouTube-Trending-Videos-Analysis

Web Search Engine: A Java web search engine based on the data collected using web crawling.
- Inverted index using Trie and Hashmap
- Ranking of web pages using Quick select algorithm
- Auto-completion using Trie and spell check using Edit distance algorithm
- https://github.com/karansingla06/Web-search-engine

E-commerce with React, Django *[personal]*: A web based e-commerce application using React, Django.
- User creation, authentication with session management
- REST APIs for CRUD operations on shopping cart
- https://github.com/karansingla06/Ecommerce-React-Django

Multiple Characters Recognition with Tensorflow: Building a model to identify Canadian postal codes
- Used EMNIST-ByClass dataset and built the neural network with Adam optimizer function
- Used OpenCV to preprocess, segment user image and identify the multiple characters
- https://github.com/karansingla06/Characters-Recognition-NeuralNetworks-Tensorflow

Improving Computer Vision accuracy using CNN *[personal]*:
- Used multiple data sources like Fashionist dataset, computer generated & real world images
- https://github.com/karansingla06/ML-AI-Projects/tree/master/ComputerVision

Credit card fraud detection, Spam Detection *[personal]*:
- Used Kaggle credit card fraud and spambase dataset respectively
- Trained with SVM, Naive Bayes classifiers and got accuracy of 96% and 91% respectively
- https://github.com/karansingla06/ML-AI-Projects/tree/master/MLProjects

CERTIFICATIONS
- "Applied Machine Learning in Python" - Coursera   Apr 20
- "Applied Plotting, Charting & Data Representation" - Coursera   Mar 20
- "Introduction to TensorFlow for AI, Machine Learning and Deep Learning" - Coursera Feb 20
- "Spark for Machine Learning & AI" - LinkedIn Learning   Feb 20
- "Building React and Django Apps" - LinkedIn Learning   Jan 20
- "Natural Language Processing with Python for Machine Learning" - LinkedIn   May 18
- Microsoft Certified Solutions Associate (MCSA) - Cloud Azure   Nov 17

ACHIEVEMENTS & COMMUNITY INVOLVEMENT
- **Graduate Student Representative** for School of Computer Science at UoW   Sep 20-Present
- Participation in Code To Win nation wide competition at UoW   Oct 19
- Volunteered for Community Clean Up event at UoW   Sep 19
- Graduate Student Society (GSS) and Indian Students Association (ISA) volunteer   Sep 19
- Spot Award for **Best Performance** at UST Global   Apr 19
- Volunteer in raising funds for Kerala flood victims at UST and raised $10000   Dec 18

References available upon request