

# KARAN SINGLA

519-977-2706 • singlak@uwindsor.ca • linkedin.com/in/karan-singla • karansingla.com • github.com/karansingla06

## PROFESSIONAL SUMMARY AND SKILLS

- **2.5+ years of full-time Software Development experience**
- **Strengths:** Data analysis, machine learning, natural language processing, cloud computing, computer vision
- Specialization in 'Applied Data Science with Python' from UofMichigan, Coursera
- **Languages:** Python, SQL, Java, C#, C++
- **Data/ML/AI:** Spark, Tableau, Tensorflow, Keras, Scikit-learn, Pandas, Matplotlib, Seaborn, NLTK, Pytorch
- **Database:** MySQL, MS SQL Server, NoSQL MongoDB
- Graduate CS Students Representative, Volunteer for GSS, ISA at the University of Windsor

## EDUCATION

<b>Master of Applied Computing</b>	University of Windsor, ON, Canada	<b>GPA 90/100</b>	2019-2021
<b>Bachelor of Computer Science</b>	JIIT, India	<b>GPA 79/100</b>	2013-2017

## WORK EXPERIENCE

<b>Senior Software Developer at UST Global</b>	Mar 2018-Jul 2019
ICE [Python-Falcon, Azure, MongoDB]: NLP platform for cognitive automation <ul style="list-style-type: none"><li>• Implemented RESTful APIs for text mining, named entity recognition, predictive modeling</li><li>• Responsible for integration of pre-trained models for custom and default tagging, training</li><li>• Appreciation award for performance and contribution to the team and delivery account</li></ul>	
<b>Software Engineer at Infosys</b>	Jul 2017-Mar 2018
On-premise applications migration to cloud Azure [C#, SQL, Powershell scripting, Azure] <ul style="list-style-type: none"><li>• Provided infrastructure, virtualization services on cloud MS Azure</li><li>• Deployed applications, databases on virtual servers and completed testing after migration</li></ul>	
<b>Software Engineer Student Intern at Infosys</b>	Jan 2017-May 2017
CrypChat [C#, .NET MVC, MS SQL Server]: Chat messenger with end to end encryption <ul style="list-style-type: none"><li>• Took ownership of backend development and database management</li><li>• Worked on encryption algorithms such as RSA, AES, Vignere, Transposition</li></ul>	
<b>Web Developer Intern at Tnine Infotech</b>	Jun 2016-Jul 2016

## MOST RELEVANT PROJECTS

<b>YouTube Statistical Data Analysis (academic)[Python, Spark]:</b> Analyzed public actions on YouTube platform	Feb 2020-Apr 2020
<ul style="list-style-type: none"><li>• COVID-19 related data mining using YouTube Data v3 API</li><li>• Data Cleaning, Processing and Visualization using Spark, Pandas, Matplotlib, Seaborn</li></ul>	
<b>Credit card fraud detection, Spam Detection (personal)[Python, Scikit-learn, Pandas]:</b>	Jan 2020-Feb 2020
<ul style="list-style-type: none"><li>• Used Kaggle credit card fraud and spambase dataset respectively</li><li>• Used SVM, Naive Bayes classifiers and got accuracy of 96% and 91% respectively</li></ul>	
<b>Recognition of Postal Codes using Neural Networks (academic)[Python, Tensorflow, Jupyter]:</b>	Oct 2019-Dec 2019
<ul style="list-style-type: none"><li>• Used EMNIST-ByClass dataset and built the neural network with Adam optimizer function</li><li>• Used OpenCV to pre-process, segment user image and identify the multiple characters</li></ul>	
<b>Improving Computer Vision accuracy using CNN (personal)[Python, Tensorflow, Keras]:</b>	Oct 2019-Dec 2019
<ul style="list-style-type: none"><li>• Used multiple data sources like Fashion dataset, computer generated &amp; real world images</li><li>• Used CNN filters, pooling to improve accuracy from 87% to 98%</li></ul>	

## OTHER PROJECTS

<b>Travel Expert (personal)[Python-Django, Javascript-React, SQL]:</b>	Mar 2020-Apr 2020
<ul style="list-style-type: none"><li>• REST APIs for CRUD operations on travel packages</li><li>• React reusable components for listing, booking, checkout pages</li></ul>	
<b>Virtual Assistant (academic)[Python-Django, Bootstrap]:</b> Admin controlled chat-bot	Sep 2019-Dec 2019
<ul style="list-style-type: none"><li>• Used IBM Watson for named entity recognition to define the intents, entities, dialog flows</li><li>• Built RESTful APIs to accommodate the admin changes made through the chat</li></ul>	
<b>Web Search Engine (academic)[Java, Eclipse]:</b> Based on data collected using web crawling	Sep 2019-Nov 2019
<ul style="list-style-type: none"><li>• Implemented inverted index, ranking using Quick-Select, auto-completion using Trie, spell-check using Edit-Distance algorithms</li></ul>	

References available upon request