

# KARAN SINGLA

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## PROFESSIONAL SUMMARY AND SKILLS

- **2.5+ years of full-time Software Development experience**
- **Strengths:** Full Stack development, REST, data structures, OOP, AI, machine learning, interpersonal skills
- **Languages:** Python, SQL, Java, C#, C++, C, JavaScript
- **Web Development:** Django, Flask, Falcon, .NET MVC, Bootstrap, HTML, CSS, React(Beginner)
- **Database:** NoSQL MongoDB, MySQL, MS SQL Server
- **Process and Tools:** Azure, Scrum and Agile, Git, Docker, JIRA, MS Office, Spark, Visual Studio, Postman
- 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 backend development, database design, client management, collaboration with UI teams, CI/CD, unit testing with pytest and code coverage above 85%</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
Developed static responsive web applications as per client requirements	

## ACADEMIC PROJECTS

<b>Virtual Assistant [Python-Django]:</b> Admin controlled chat-bot to help students	Oct 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>Recognition of Canadian Postal Codes using Neural Networks[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>Web Search Engine [Java, Eclipse]:</b> Search engine 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>	
<b>Tic Tac Toe [C]:</b> A multiplayer game based on client-server model using socket programming	Mar 2020-Apr 2020

## INDIVIDUAL PROJECTS

<b>Travel Expert [Python-Django, Javascript-React, SQL]:</b> Web app to view, book travel packages	Mar 2020-Apr 2020
<ul style="list-style-type: none"><li>• REST APIs for CRUD operations on shopping cart</li><li>• React reusable components for listing, cart pages</li></ul>	
<b>Credit card fraud detection, Spam Detection [Python, Jupyter]:</b>	Jan 2020-Feb 2020
<ul style="list-style-type: none"><li>• Used Kaggle credit card fraud and spambase dataset respectively</li><li>• Used Scikit-learn SVM, Naive Bayes classifiers and got accuracy of 96% and 91% respectively</li></ul>	
<b>Improving Computer Vision accuracy using Neural Networks [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>	

References available upon request