

CURRICULUM VITAE



VPO Mahilpur, District Hoshiarpur

India

+919779720767

slovepreet435@gmail.com

LOVEPREET SINGH

SKILLS & ABILITIES

Python
R
C++
Tableau
Tensorflow
Git
Machine Learning

EDUCATION **BACHELOR OF TECHNOLOGY- AUTOMOBILE ENGINEERING (2016-20)**

Lovely Professional University, Phagwara - Affiliated to NCTE, COA, PCI, IAP, BCI, UGC

Aggregate: 8.68 GPA

GRADE 12TH-NON MEDICAL (2016)

Rayat Bahra School of Education, Hoshiarpur - PSEB Board

Aggregate: 80.44%

GRADE 10TH (2014)

Guru Nanak Public School, Mahilpur - PSEB Board

Aggregate: 90.61%

TRAINING Two Months Industrial Training- Sonalika International Tractors Ltd. Hsp.

IT Automation with Python Specialization by Google

Data Engineering, Big Data and Machine Learning Specialization by Google

Tensorflow Developer Certification Program by DeepLearning.AI

Natural Language Processing Specialization by DeepLearning.AI

AI in Medicine Specialization by DeepLearning.AI

Applied Data Science with Python Specialization by University of Michigan

LEADERSHIP	Coordinator of Technical ASME-EFX in the University. Held the position of Class-Representative in the final year of the University.
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PROJECT	WEB APP FOR DETECTING PNEUMONIA USING CONVOLUTIONAL NEURAL NETWORK
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Repository link - https://github.com/LovepreetSingh-09/Pneumonia_Detection

In this project a web application which used a deep learning model for detecting pneumonia from x-ray images was developed by me with the validation and test accuracy close to 90%. Various python libraries such as tensorflow, flask, scikit-learn, numpy and PIL were used to create and fine-tune the model and then to integrate it with the application.

ELECTRIC BIKE WITH AUTOMATED RETRACTABLE WHEELS

Project Supervisor - Mr. Sanjeev Kumar(Assistant Professor)

In this project a pair of retractable wheels were adjusted at the back side of the bike. The ECU was programmed in such a way that whenever it receives the signal from sensor about the low speed (15 kmph) of the vehicle, it sends a signal to the hub-motor to actuate the wheels to maintain the balance and prevent accidents which often happens with short-heighted and old-age people on two-wheelers.

US COVID-19 CASES ANALYSIS AND PATTERN PROJECTION

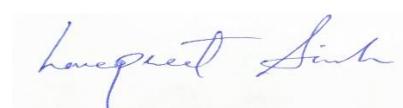
Repository link - https://github.com/LovepreetSingh-09/US_COVID-19_Analysis

This project is done by me to analyze the COVID-19 cases in US by doing statistical analysis on the data recorded day by day. A chart for active cases and deaths was created separately to understand the trend and pattern of the pandemic.

ACHIEVEMENTS	Finished 4 years of bachelors at 2 nd position in the class in Lovely Professional University. Recipient of Bronze Medal for being 3rd in the grade 12th by the Rayat Bahra Institute. Awarded with the cash prize of Rs.5500 by the school authority for being in top 5 positions in Matriculation Exams.
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LANGUAGE	English Hindi Punjabi
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INTEREST	Deep Learning Learning About New Technologies Listening Music Playing Cricket
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Signature

Sr. No. **57419**



LOVELY
PROFESSIONAL
UNIVERSITY

Phagwara (144411), Punjab, India

PROVISIONAL CERTIFICATE

This is to certify that Mr. Lovepreet Singh son of Mr. Sukhwant Singh bearing Registration No. 11607519 has completed all the requirements for the award of the degree of Bachelor of Technology (Automobile Engineering) in the year 2020. He will be awarded the degree at the next convocation of the University.

Monica Gulati

Certificate No. 58579

Dated: 28 Oct,2020

Place: Phagwara (Punjab)

Dr. Monica Gulati

Registrar

FRM0128100



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Member of Association of
Indian Universities (AIU), New Delhi

Sr. No. 59070

LPU/DE/DOR/EC/201027/736420/P139/16/0070

Code No. CRT022

Date: 27-Oct-20

TO WHOM SO EVER IT MAY CONCERN



Name of Student Mr.	Lovepreet Singh
S/o Sh.	Sukhwant Singh
Registration No.	11607519
Name of the programme	Bachelor of Technology (Automobile Engineering)
Batch	2016
Lovely Faculty of Technology & Sciences	

This is to certify that the above said student was a bonafide student of this University and he has completed this programme in August, 2020 in English medium.

He has obtained 8.68 CGPA and Equivalent percentage is 78.12%.

For the academic performance, latest result may be verified from the University website (www.lpu.in/authenticate).

Checked & Verified by

Amritsharan

Assistant Registrar (Records)

This is system generated certificate and does not require any seal.

Disclaimer: This Certificate is issued on the basis of information available in the office of records on the date of its issue and the university reserves the right of update/change any information contained herein without notice further the University expressly disclaims all obligations to confirm the accuracy of any of the particulars in this certificate based upon information submitted by the candidate.

FRM0128100



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Member of Association of Indian Universities (AIU), New Delhi

Sr. No. 13253

LPU/DE/DOR/EC/201027/736419/P139/16/0070

Code No. CRT010

Date:27-Oct-20

BONAFIDE CERTIFICATE



Name of Student Mr.	Lovepreet Singh
S/o Sh.	Sukhwant Singh
Registration No.	11607519
Name of the programme	Bachelor of Technology (Automobile Engineering)
Batch	2016
Lovely Faculty of Technology & Sciences	

This is to certify that the above said student was a bonafide student of this University from August, 2016 to August, 2020.

For the academic performance, latest result may be verified from the University website (www.lpu.in/authenticate).

Checked & Verified by

Assistant Registrar (Records)

This is system generated certificate and does not require any seal.

Disclaimer: This Certificate is issued on the basis of information available in the office of records on the date of its issue and the university reserves the right of update/change any information contained herein without notice further the University expressly disclaims all obligations to confirm the accuracy of any of the particulars in this certificate based upon information submitted by the candidate.

FRM0128100



LOVELY PROFESSIONAL UNIVERSITY

Jalandhar-Delhi G.T. Road, Phagwara, Punjab (India)-144411

Established by the State Legislature of Punjab through the Lovely Professional University Act and Recognized by UGC under Section 2(f) of the UGC Act, 1956



Academic Transcript

Student Name	: Lovepreet Singh	Programme :	Bachelor of Technology (Automobile Engineering)
Registration no.	: 11607519	Mode	: Regular (Full Time)
Father's Name	: Mr. Sukhwant Singh	Date of initial registration : August,2016	
Mother's Name	: Ms. Satwinder Kaur		

TERM-I		TGPA : 7.35	Equivalent percentage : 66.15 %	
S.No.	Course		*Credits	*Grade
1	CHE110 :: ENVIRONMENTAL STUDIES		4	A
2	MEC106 :: INTRODUCTION TO MECHANICAL ENGINEERING		4	B+
3	MEC108 :: MECHANICAL WORKSHOP		2	A
4	MEC120 :: FUTURE TRENDS IN ENGINEERING		1	A+
5	MTH165 :: MATHEMATICS FOR ENGINEERS		4	B
6	PEL121 :: COMMUNICATION SKILLS-I		3	A
7	PHY109 :: ENGINEERING PHYSICS		4	B+
8	PHY119 :: ENGINEERING PHYSICS LABORATORY		1	A

TERM-II		TGPA : 7.73	Equivalent percentage : 69.57 %	
S.No.	Course		*Credits	*Grade
1	ATE201 :: AUTOMOBILE ENGINEERING DRAWING		3	A
2	CHE122 :: ENGINEERING CHEMISTRY LABORATORY		1	A+
3	CHE124 :: ENGINEERING CHEMISTRY		3	B+
4	ECE131 :: BASIC ELECTRICAL AND ELECTRONICS ENGINEERING		4	B+
5	ECE132 :: BASIC ELECTRICAL AND ELECTRONICS ENGINEERING LABORATORY		1	A+
6	MEC208 :: ENGINEERING MATERIALS		3	A
7	MTH166 :: DIFFERENTIAL EQUATIONS AND VECTOR CALCULUS		4	B+
8	PEL131 :: COMMUNICATION SKILLS-II		3	A+

TERM-III		TGPA : 9.30	Equivalent percentage : 83.70 %	
S.No.	Course		*Credits	*Grade
1	ATE203 :: AUTOMOBILE WORKSHOP TRAINING SEMINAR		3	B+
2	ATE205 :: INTERNAL COMBUSTION ENGINES		3	O
3	ATE306 :: AUTOMOTIVE CHASSIS AND SUSPENSION SYSTEM		3	A+
4	ATE307 :: AUTOMOTIVE ENGINE AND CHASSIS COMPONENT LABORATORY		1	A+
5	CSE101 :: COMPUTER PROGRAMMING		3	A+
6	CSE104 :: COMPUTER PROGRAMMING LABORATORY		1	O
7	MEC201 :: SOLID MECHANICS		4	O
8	MEC234 :: MECHANICS AND MATERIAL LABORATORY		1	O
9	MEC235 :: THERMO FLUIDS		4	O
10	MEC327 :: THERMO-FLUIDS LABORATORY		1	O
11	PES314 :: SOFT SKILLS-I		3	A+

Certificate No. : D2019033

Date of issue : 27-Aug-2020

Place : Phagwara (Punjab)

Prepared by

(Officer Incharge)
Checked & Verified by

For Dean (Examinations)



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Academic Transcript

Student Name	: Lovepreet Singh	Programme :	Bachelor of Technology (Automobile Engineering)
Registration no.	: 11607519	Mode	: Regular (Full Time)
Father's Name	: Mr. Sukhwant Singh	Date of initial registration :	August,2016
Mother's Name	: Ms. Satwinder Kaur		

TERM-IV		TGPA : 9.48	Equivalent percentage : 85.32 %	
S.No.	Course		*Credits	*Grade
1	ATE206 :: AUTOMOTIVE TRANSMISSION		3	O
2	ATE211 :: AUTOMOTIVE STRUCTURES AND DESIGN		4	O
3	ATE212 :: HOMOLOGATION AND POLLUTION CONTROL		3	O
4	CSE202 :: OBJECT ORIENTED PROGRAMMING		3	A+
5	MEC200 :: INDUSTRY ATTACHMENT-I		1	B+
6	MEC205 :: MANUFACTURING TECHNOLOGY		3	O
7	MEC219 :: THEORY OF MACHINES		4	A+
8	MEC229 :: THEORY OF MACHINES LABORATORY		1	O
9	MEC317 :: MANUFACTURING TECHNOLOGY LABORATORY		2	A
10	PEV106 :: VERBAL ABILITY-I		3	O

TERM-V		TGPA : 9.37	Equivalent percentage : 84.33 %	
S.No.	Course		*Credits	*Grade
1	ATE301 :: SEMINAR ON SUMMER TRAINING		3	A
2	ATE303 :: AUTOMOTIVE ENGINE COMPONENT DESIGN		4	O
3	ATE305 :: COMPUTER AIDED VEHICLE DESIGN LABORATORY		2	O
4	ATE322 :: AUTOMOTIVE SENSORS AND APPLICATIONS		3	O
5	ENG888 :: SHORT STORIES IN WORLD LITERATURE		3	O
6	INT217 :: INTRODUCTION TO DATA MANAGEMENT		3	O
7	MEC232 :: NUMERICAL AND STATISTICAL METHOD LABORATORY		1	O
8	MEC301 :: HEAT TRANSFER		4	A
9	MEC420 :: COMPUTER AIDED MANUFACTURING LABORATORY		1	A
10	PEA305 :: ANALYTICAL SKILLS-I		3	O
11	PEV107 :: VERBAL ABILITY-II		3	A+

TERM-VI		TGPA : 9.07	Equivalent percentage : 81.63 %	
S.No.	Course		*Credits	*Grade
1	ATE308 :: ALTERNATIVE FUEL AND ENERGY SYSTEM		3	A+
2	ATE309 :: ENGINE AND FUEL TESTING LABORATORY		1	A+
3	ATE310 :: VEHICLE DYNAMICS AND STRUCTURE		3	O
4	ATE323 :: AUTOMOTIVE INSTRUMENTATION AND EMBEDDED SYSTEMS		3	O
5	ATE328 :: AUTOMOTIVE ELECTRICAL AND ELECTRONICS LABORATORY		1	A
6	ECE404 :: AUTOMOTIVE ELECTRICAL AND ELECTRONICS		3	O
7	GEO802 :: BASICS OF GIS AND REMOTE SENSING		3	A+
8	INT232 :: DATA SCIENCE TOOLBOX : R PROGRAMMING		3	A
9	INT322 :: COMPUTING SYSTEM AND TECHNOLOGIES		2	A+
10	PEA306 :: ANALYTICAL SKILLS-II		3	A+
11	PES315 :: SOFT SKILLS-II		3	A

Certificate No. : D2019033

Date of issue : 27-Aug-2020

Place : Phagwara (Punjab)

J. B.
Prepared by

K.A.
(Officer Incharge)
Checked & Verified by

R.P.
For Dean (Examinations)



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Academic Transcript

Student Name	: Lovepreet Singh	Programme :	Bachelor of Technology (Automobile Engineering)
Registration no.	: 11607519	Mode	Regular (Full Time)
Father's Name	: Mr. Sukhwant Singh	Date of initial registration :	August,2016
Mother's Name	: Ms. Satwinder Kaur		

TERM-VII		TGPA : 8.17	Equivalent percentage : 73.53 %	
S.No.	Course		*Credits	*Grade
1	ATE324 :: E-MOBILITY PROJECT		3	A
2	ATE325 :: ENERGY SUPPLY STORAGE AND CONVERSION		3	A
3	ATE470 :: CAPSTONE PROJECT-I		2	B+
4	INT233 :: DATA VISUALIZATION		2	A
5	INT234 :: PREDICTIVE ANALYTICS		2	O

TERM-VIII		TGPA : 7.79	Equivalent percentage : 70.11 %	
S.No.	Course		*Credits	*Grade
1	ATE494 :: CAPSTONE PROJECT-II		3	A
2	MGN911 :: BUSINESS ETHICS		3	A
3	PHY802 :: PHYSICS OF SENSORS		3	B+

- * The student has successfully completed the Programme in August, 2020.
- * The student has cleared all the courses in first attempt.

CGPA : 8.68
Equivalent percentage : 78.12 %

- * * 'Credit' means credit allotted to the course and 'Grade' means grade earned by the student.
- * Basis of evaluation, grading, minimum CGPA requirement and other information is printed overleaf.
- * This transcript can be authenticated by submitting the certificate number to www.ipu.in/authenticate.
- * The multiplier factor for converting CGPA to equivalent percentage is 9.

Certificate No. : D2019033
Date of issue : 27-Aug-2020
Place : Phagwara (Punjab)

Prepared by

(Officer Incharge)
Checked & Verified by

For Dean (Examinations)

Test Report Form

ACADEMIC

NOTE Admission to undergraduate and post graduate courses should be based on the ACADEMIC Reading and Writing Modules.
GENERAL TRAINING Reading and Writing Modules are **not** designed to test the full range of language skills required for academic purposes.
It is recommended that the candidate's language ability as indicated in this Test Report Form be re-assessed **after two years** from the date of the test.

Centre Number

IN855

Date

14/MAR/2020

Candidate Number

484882

Candidate Details

Family Name

-

First Name

LOVEPREET SINGH

Candidate ID

U6310092



Date of Birth

09/02/2000

Sex (M/F)

M

Scheme Code

Private Candidate

Country or Region of Origin

Country of Nationality

INDIA

First Language

PUNJABI

Test Results

Listening

7.5

Reading

7.0

Writing

6.5

Speaking

6.0

Overall Band Score
7.0

CEFR Level
C1

Administrator Comments

Administrator's Signature

Centre stamp



Validation stamp



Date

04/12/2020

Test Report Form Number

19IN484882TL855A



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P ROFESSIONAL
U NIVERSITY

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LPU/DE/DOR/EC/201231/0001/P139/16/0070

Date: 29 Dec 20

LETTER OF RECOMMENDATION

I am pleased to recommend **Lovepreet Singh** for an MS at your esteemed university. Lovepreet Singh has been my student for one semester and I have taught him Data Science Toolbox(R Programming). He is a fine student, in terms of aptitude, hard work, and motivation. An intelligent, sincere and conscientious student, Lovepreet Singh has maintained a good academic record in my course.

His performance can be described through his clear concepts and strong fundamentals, which have always enabled him to grasp new ideas and topics with relative ease. Data cleaning, Data Pre processing are important tools that form the foundation of a Data Analyst and he handled these concepts quite well. Lovepreet Singh comes up with innovative ways of applying his concepts.

He is always an independent thinker and is seeking to learn new ideas and concepts, he has shown great dedication by venturing beyond the scope of the subject ideas. He keeps himself updated of the latest developments and goes through various technical literature which was evident from the technical discussions and interviews that I have had with him.

A student who believes in performing to the best of his ability, Lovepreet Singh will work very hard towards the fulfillment , of any responsibility that he undertakes. I strongly recommend him for admission to your college for graduate studies.

Mrinalini Rana

Mrinalini Rana

Assistant Professor

Department of Computer Science and Engineering

Mobile : 9876683474

E mail : mrinalini.22138@lpu.co.in



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Date: 29 Dec 20

LETTER OF RECOMMENDATION

I am pleased to recommend **Lovepreet Singh** for an MS at your esteemed university. Lovepreet has been my student for one semester and I have taught him Predictive Analysis. He is a fine student, in terms of aptitude, hard work, and motivation. An intelligent, sincere and conscientious student, Lovepreet has maintained a good academic record in my course.

His performance can be described through his clear concepts and strong fundamentals, which have always enabled him to grasp new ideas and topics with relative ease. Data cleaning, Data Pre processing, Sorting, Searching and Machine Learning algorithms are important tools that form the foundation of a Data Analyst and he handled these concepts quite well. Lovepreet comes up with innovative ways of applying his concepts.

Always an independent thinker and he is seeking to learn new ideas and concepts, he has shown great dedication by venturing beyond the scope of the subject ideas. He keeps himself updated of the latest developments and goes through various technical literature which was evident from the technical discussions and interviews that I have had with him. A student who believes in performing to the best of his ability, Lovepreet will work very hard towards the fulfillment, of any responsibility that he undertakes. I strongly recommend him for admission to your college for graduate studies.

Tanima Thakur
Assistant Professor
Department of Computer Science and Engineering
Mobile : 9855285756
E mail : tanima.23532@lpu.co.in

Letter of Intent

My name is Lovepreet Singh. Due to my innate interest in the field of Data Science, I opted it as my undergraduate minor while studying Automobile Engineering at **Lovely Professional University, Punjab, India**. It gave me exposure to numerous subjects like Data Management, Data Visualization, Numerical and Statistical Methods, Predictive Analysis etc. I was so much fascinated by this stream that I feel like it was a breakthrough time in my professional career. It made me realize what I want to do in my life and what path I have to follow. The curiosity led me to study more advanced subjects by reading books such as Hands-On Machine Learning 2nd Edition by Aurelien Geron, Grokking Deep Learning by Andrew Trask, R for Data Science by Hadley Wickham, Python Machine Learning by Sebastian Raschka and Advanced Deep Learning with Keras by Rowel Atienza among others. Other than reading books, I completed several online specialization programs such as Deep Learning, Tensorflow Developer, NLP, AI in Medicine by DeepLearning.AI, Google IT Automation with Python, From Data To Insights with GCP, Data Engineering, Big Data and Machine Learning by Google, Data Science: Foundations using R by Johns Hopkins University, Applied Data Science with Python by University of Michigan and some other programs as well. These books and specializations has helped me to pursue this field and also helped me to have a closer look at the real world applications of Data Science. As now I have completed my Bachelor's, I intend to study **Master of Science in Data Science** program being offered at one of the most prestigious universities of Canada – **Thompson Rivers University, British Columbia, Canada**.

I opted for this program because this is the field which thrives on data and as the world is becoming digital, more and more data is being generated every single second, this data can be used for analysis, visualization, pattern-recognition, making inferences and several other purposes to solve various problems. I believe that this field has the ability to reduce errors which are quite common by humans in many fields such as Healthcare and Medicine, Automobile, Business, Marketing, Sports, Education, Disaster Management and other sectors as well. As a passionate student with an ardent interest in the practical implementations, I have learnt the principles of Data Science which are commonly used in practice and real world applications by doing some amazing projects which I have made public on my github account such as Web Application for detecting pneumonia from x-ray images, US COVID-19 daily cases and deaths analysis and pattern projection, implementing Neural Style Transfer from scratch and few others. These projects has widen my scope of learning and research and also it has intrigued me to explore the option of pursuing master's course in Data Science from your prestigious University, which I believe will not only supplement my knowledge that I have acquired but also provide me with the best possible platform for the attainment of my future goals. My main aim is to use this field with my skills to come up with new and innovative ideas to make the life easier and better so that the humans would have the lesser stress and burden to deal with the problems that emerge from their own mistakes which are quite often in various decision-making situations. To become

a person of that caliber, I need to learn from some pioneers and experts of this field and as a student in your University, I would be able to interact with them in a very positive way and their invaluable feedbacks and suggestions would be very crucial for me to be successful.

When I think of studying abroad numerous factors like Quality and internationally recognized degrees, cost effective studies, a safe destination of study and a welcoming & multicultural environment – I find these and much more in Canada thereby making it one of the most favored destinations for me. A degree acquired from a Canadian university is recognized globally and is valued highly in the international job market. A very important factor for me like other international students is the safety and security of the country. In this respect, Canada is one of the safest places to study with very low crime rates and cases of racial discrimination.

Browsing through the information given on the Website of **Thompson Rivers University**, I am highly impressed with the accomplished faculty members, environment and the facilities the University has to offer to its students. I also realize that the syllabus offered at this University is designed to meet the demands of the present day industry. There are many research and teaching labs in the University and is ranked amongst the top in Canada which indicate its high standard. Given these facts, I believe that there cannot be a better platform than this University to obtain advanced knowledge of this field. I have come to a conclusion that the **Master of Science in Data Science program at Thompson Rivers University** is excellently structured to match my requirement. It will be a great privilege for me to study under such a distinguished faculty.

I am fully aware of the fact that pursuing this course requires a high level of intelligence, dedication and immense sacrifice. I am confident that I have the capability to contribute positively towards your esteemed University and with great hope. I eagerly wait for your benevolent act of accepting me into your fold and granting me an admission.

Regards,

Lovepreet Singh



International Tractors Limited

Head Office & Plant: Village Chak Gujran, P.O. Piyanwala
Jalandhar Road, Hoshiarpur (Pb.)-146022
Phone: +91-1882-302220, 302221, Fax: +91-1882-302222
Email: sonalika@sonalika.com

Marketing Office: C-133 A, Sector-2,
Noida- 201301
Phone: +91-120-4095860

ITL/HR/2018-19/STCL/252

7-Jul-2018

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr/s. Lovepreet Singh student of B.Tech (Automobile Engg.) from LPU , Jalandhar has successfully completed his/her Industrial Training from Jun-2018 to July-2018 in Our Company.

We wish him/her all the best in his/her future endeavors.

For International Tractors Ltd.

B K Singh

Sr. GM-Human Resources



website: www.sonalika.com

Regd. Office : Pankaj Plaza - 1,
Plot No. 2, Commercial Complex
Karkardooma, Delhi - 110092 (India)
E-mail: sonalika@sonalika.com
(CIN-U74899DL1995PLC073245)



4 Courses

Introduction to TensorFlow for Artificial Intelligence, Machine Learning, and Deep Learning

Convolutional Neural Networks in TensorFlow

Natural Language Processing in TensorFlow

Sequences, Time Series and Prediction



08/08/2020

Lovepreet Singh

has successfully completed the online, non-credit Professional Certificate

DeepLearning.AI TensorFlow Developer

Congratulations! You have completed all 4 courses of the DeepLearning.AI TensorFlow Developer Professional Certificate program. As part of this Professional Certificate program, you have learned: how to build and train neural networks using TensorFlow, how to improve network performance using convolutions as you train it to identify real-world images, how to teach machines to understand, analyze, and respond to human speech with natural language processing systems, and more! These, and other TensorFlow concepts, are going to be at the forefront of the coming transformation to an AI-powered future.

Laurence Moroney is an AI Advocate at Google Research

The online specialization named in this certificate may draw on material from courses taught on-campus, but the included courses are not equivalent to on-campus courses. Participation in this online specialization does not constitute enrollment at this university. This certificate does not confer a University grade, course credit or degree, and it does not verify the identity of the learner.

Verify this certificate at:
coursera.org/verify/professional-cert/4A8X35DNARWD



4 Courses

Natural Language Processing with Classification and Vector Spaces

Natural Language Processing with Probabilistic Models

Natural Language Processing with Sequence Models

Natural Language Processing with Attention Models



Nov 30, 2020

Lovepreet Singh

has successfully completed the online, non-credit Specialization

Natural Language Processing

Congratulations! You have completed all four courses of Natural Language Processing - a deeplearning.ai Specialization. As part of this Specialization, you have learned the classical machine learning skills and the state-of-the-art deep learning techniques needed to build NLP systems. You are now equipped to design applications that perform question-answering and sentiment analysis, create tools to translate languages and summarize text, and build chatbots! These, and other NLP applications, are going to be at the forefront of the coming transformation to an AI-powered future.

Younes Bensouda Mourri Łukasz Kaiser

Younes Bensouda
Mourri
Instructor of AI at
Stanford University

Łukasz Kaiser
Staff Research Scientist
at Google and Chargé de Recherche at CNRS

The online specialization named in this certificate may draw on material from courses taught on-campus, but the included courses are not equivalent to on-campus courses. Participation in this online specialization does not constitute enrollment at this university. This certificate does not confer a University grade, course credit or degree, and it does not verify the identity of the learner.

Verify this certificate at:
coursera.org/verify/specialization/EQR65PQ5CBY9



3 Courses

AI for Medical Diagnosis
AI for Medical Prognosis
AI For Medical Treatment



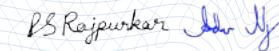
21.09.2020

Lovepreet Singh

has successfully completed the online, non-credit Specialization

AI for Medicine

In this Specialization, you gained practical experience applying machine learning to concrete problems in medicine. You learned how to diagnose chest x-rays and brain scans, evaluate your models, handle missing data, and estimate the effect of treatments. Now you can help transform the practice of medicine worldwide. You can go on to pursue a career in the medical industry as a data scientist, machine learning engineer, innovation officer, or business analyst!



Pranav Rajpurkar, PhD
Candidate at Stanford
University

The online specialization named in this certificate may draw on material from courses taught on-campus, but the included courses are not equivalent to on-campus courses. Participation in this online specialization does not constitute enrollment at this university. This certificate does not confer a University grade, course credit or degree, and it does not verify the identity of the learner.

Verify this certificate at:
coursera.org/verify/specialization/5HGAW4HH6V6W



5 Courses



08/15/2020

Lovepreet Singh

has successfully completed the online, non-credit Specialization

Applied Data Science with Python

The 5 courses in this University of Michigan specialization introduce learners to data science through the python programming language. This skills-based specialization is intended for learners who have a basic python or programming background, and want to apply statistical, machine learning, information visualization, and text analysis techniques to gain new insight into their data. In the final course, students will work on real-world data analysis projects, building a portfolio which showcases their work while at the same time helping real clients gain a better understanding of their data.

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A handwritten signature in black ink.

Christopher Brooks
Research Assistant
Professor
School of Information

A handwritten signature in black ink.

Kevyn Collins-Thompson
Associate Professor
School of Information

A handwritten signature in black ink.

Daniel Romero, Ph.D.
Assistant Professor
School of Information
University of Michigan

A handwritten signature in black ink.

V. G. Vinod Vydiswaran
Assistant Professor
School of Information

Verify this certificate at:
coursera.org/verify/S73DM8VQTVS8



6 Courses

Crash Course on Python

Using Python to Interact with the Operating System

Introduction to Git and GitHub

Troubleshooting and Debugging Techniques

Configuration Management and the Cloud

Automating Real-World Tasks with Python



28.09.2020

Lovepreet Singh

has successfully completed the online, non-credit Professional Certificate

Google IT Automation with Python

This six-course certificate, developed by Google, is designed to provide IT professionals with in-demand skills -- including Python, Git, and IT automation -- that can help them advance their careers. The hands-on curriculum is designed to teach learners how to write code in Python, with a special focus on how this applies to automating tasks in the world of IT support and systems administration. Those who received this certificate passed all graded assessments with a score of 80% or above. They should have a strong foundation in how to use Git and GitHub, troubleshoot and debug complex problems, and apply automation at scale by using configuration management and the Cloud in order to prepare them for more advanced IT Support Specialist or Junior Systems Administrator positions.

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A small, semi-transparent watermark of the Google logo is located in the upper right corner of the certificate.

Verify this certificate at:
coursera.org/verify/professional-cert/B3VRGWARZHWB



5 Courses

Google Cloud Platform
Fundamentals: Core
Infrastructure

Essential Google Cloud
Infrastructure: Foundation

Essential Google Cloud
Infrastructure: Core Services

Elastic Google Cloud
Infrastructure: Scaling and
Automation

Reliable Google Cloud
Infrastructure: Design and
Process

Google Cloud

08/24/2020

Lovepreet Singh

has successfully completed the online, non-credit Specialization

Architecting with Google Compute Engine

In this five-course accelerated specialization, learners explored and deployed solution elements, including infrastructure components such as networks, systems and applications services using Google Cloud Platform, with a focus on Compute Engine.

Google Cloud Training

Google Cloud Training

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Verify this certificate at:
coursera.org/verify/specialization/R995U56LYGR6



4 Courses

Exploring and Preparing
your Data with BigQuery

Creating New BigQuery
Datasets and Visualizing
Insights

Achieving Advanced Insights
with BigQuery

Applying Machine Learning
to your Data with GCP

Google Cloud

Sep 11, 2020

Lovepreet Singh

has successfully completed the online, non-credit Specialization

From Data to Insights with Google Cloud Platform

This four-course accelerated online specialization teaches course participants how to derive insights through data analysis and visualization using the Google Cloud Platform. The courses feature interactive scenarios and hands-on labs where participants explore, mine, load, visualize, and extract insights from diverse Google BigQuery datasets. The courses cover data loading, querying, schema modeling, optimizing performance, query pricing, and data visualization.

Google Cloud Training

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Verify this certificate at:
coursera.org/verify/specialization/6ZBMAJFCF4M3



5 Courses

The Data Scientist's Toolbox
R Programming
Getting and Cleaning Data
Exploratory Data Analysis
Reproducible Research



08/16/2020

Lovepreet Singh

has successfully completed the online, non-credit Specialization

Data Science: Foundations using R

The Data Science Specialization covers foundational concepts and tools for the data science pipeline. Successful participants learn how to use the tools of the trade, think analytically about complex problems, manage large data sets, create visualizations, and publish reproducible analyses. This certificate does not confer academic credit toward a degree or official status at the Johns Hopkins University.

Three handwritten signatures in black ink, likely belonging to Jeff Leek, Roger Peng, and Brian Caffo, are placed above a decorative wavy line pattern.

Jeff Leek, PhD; Roger Peng, PhD; Brian Caffo, PhD
Department of Biostatistics
Johns Hopkins Bloomberg School of Public Health

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Verify this certificate at:
coursera.org/verify/specialization/FLDKYV2R4LXE



4 Courses



Sep 12, 2020

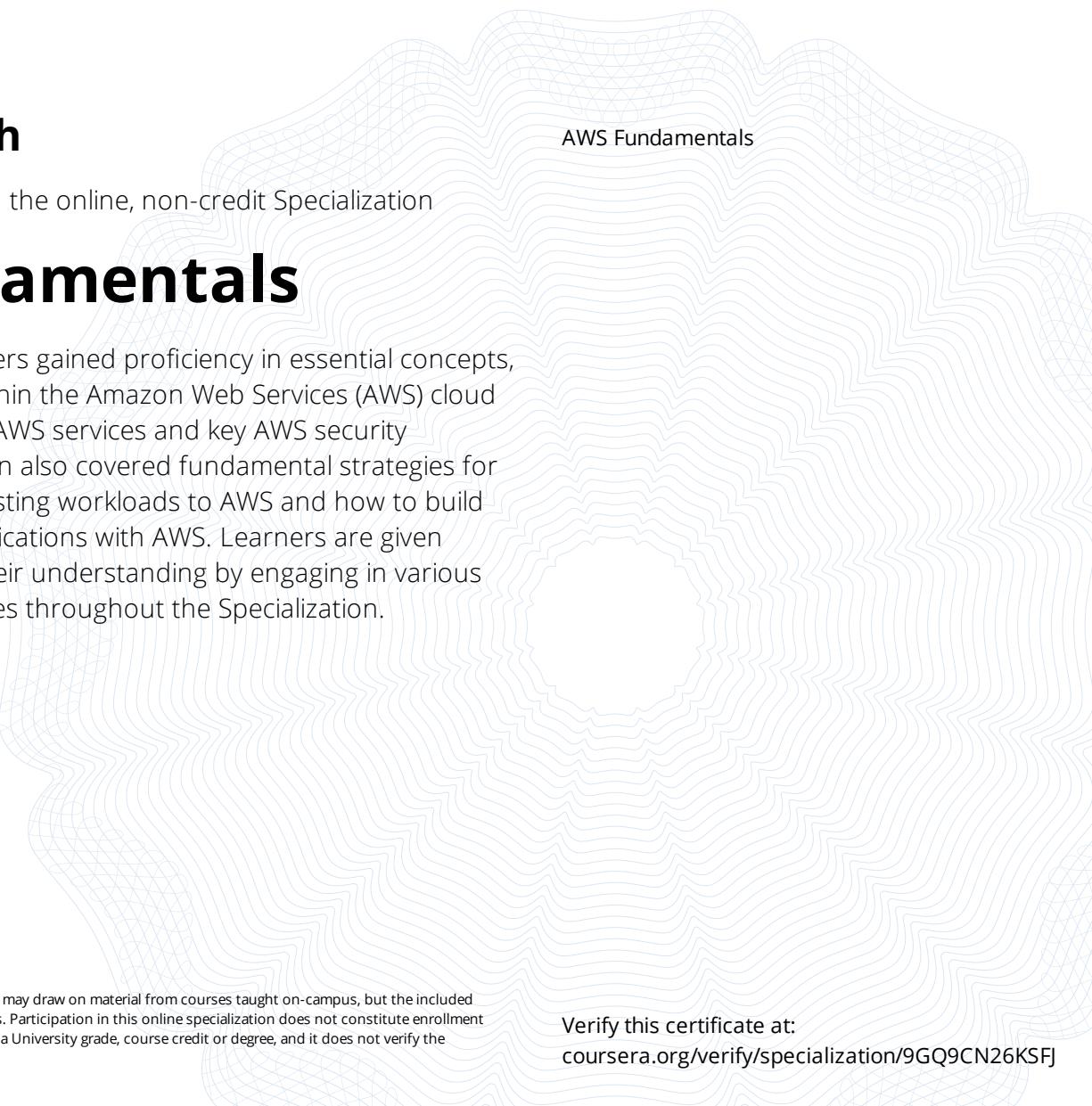
Lovepreet Singh

has successfully completed the online, non-credit Specialization

AWS Fundamentals

AWS Fundamentals

In this Specialization, learners gained proficiency in essential concepts, services, and use cases within the Amazon Web Services (AWS) cloud ecosystem, including core AWS services and key AWS security concepts. The Specialization also covered fundamental strategies for planning and migrating existing workloads to AWS and how to build and deploy serverless applications with AWS. Learners are given opportunities to solidify their understanding by engaging in various hands-on labs and exercises throughout the Specialization.



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Verify this certificate at:
coursera.org/verify/specialization/9GQ9CN26KSFJ



5 Courses

Google Cloud Platform Big Data and Machine Learning Fundamentals

Modernizing Data Lakes and Data Warehouses with GCP

Building Batch Data Pipelines on GCP

Building Resilient Streaming Analytics Systems on GCP

Smart Analytics, Machine Learning, and AI on GCP



Nov 7, 2020

Lovepreet Singh

has successfully completed the online, non-credit Specialization

Data Engineering, Big Data, and Machine Learning on GCP

This five-course accelerated specialization is designed for data professionals who are responsible for designing, building, analyzing, and optimizing big data solutions. Through a combination of video lectures, quizzes, and hands-on labs, learners carried out serverless data analysis and productionize machine learning models. This specialization is designed to give learners a robust hands-on experience and is primarily lab-focused.

Google Cloud Training

Google Cloud Training

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Verify this certificate at:
coursera.org/verify/specialization/4A3YRYYND388



07/16/2020

Lovepreet Singh

has successfully completed

Convolutional Neural Networks

an online non-credit course authorized by deeplearning.ai and offered through Coursera

A handwritten signature in blue ink that reads "Andrew Ng".

Adjunct Professor Andrew Ng
Computer Science

COURSE CERTIFICATE



Verify at coursera.org/verify/LUT8VJ93P243

Coursera has confirmed the identity of this individual and
their participation in the course.



08/01/2020

Lovepreet Singh

has successfully completed

Sequence Models

an online non-credit course authorized by deeplearning.ai and offered through
Coursera

A handwritten signature in blue ink that reads "Andrew Ng".

Adjunct Professor Andrew Ng
Computer Science

COURSE CERTIFICATE



Verify at coursera.org/verify/5ARMW2DMKMX4
Coursera has confirmed the identity of this individual and
their participation in the course.



Oct 28, 2020

Lovepreet Singh

has successfully completed

How Google does Machine Learning

an online non-credit course authorized by Google Cloud and offered through Coursera

Google Cloud Training

COURSE CERTIFICATE



Verify at coursera.org/verify/MSHKFBUBJWWY

Coursera has confirmed the identity of this individual and their participation in the course.



Nov 7, 2020

Lovepreet Singh

has successfully completed

Launching into Machine Learning

an online non-credit course authorized by Google Cloud and offered through Coursera

Google Cloud Training

COURSE CERTIFICATE



Verify at coursera.org/verify/V39UV9VLL5ZS

Coursera has confirmed the identity of this individual and their participation in the course.



07/23/2020

Lovepreet Singh

has successfully completed

SQL for Data Science

an online non-credit course authorized by University of California, Davis and offered through Coursera

A handwritten signature in black ink that reads "Sadie St. Lawrence".

Sadie St. Lawrence
AI Strategy Consultant for Accenture Applied Intelligence
Founder of Women in Data (WID)
Instructor, University of California, Davis Extension

COURSE CERTIFICATE



Verify at coursera.org/verify/UPFNGYDXNY3Y
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their participation in the course.



This Certificate is awarded to

LOVEPREET SINGH

in deep appreciation for his outstanding volunteerism in support of

ASME EFX

Lovely Professional University, Punjab, India | September 14, 2018

A handwritten signature in black ink.

Said Jahanmir
President

A handwritten signature in black ink.

Thomas Costabile, P.E.
Executive Director