

Date: 23<sup>rd</sup> Nov 2020

## Acceptance Letter

Dear Author(s): Sahiti Cheguru, Sanam Sandhya Vineetha, Dr. Y Vijayalata, Solu Tapasya  
Madhusudhan, Tanvi Reddy Vuyyuru

Paper ID	ARDA_JOURNAL_12697
Paper Title	Optimal Hyper parameter tuning of Convolutional Neural Networks for Visual Sentiment Analysis

This is to enlighten you that above manuscript reviewed and appraised by the review committee members of ARDA and it is accepted for the purpose of publication in the **“Walailak Journal of Science and Technology– Q3”** with **ISSN: 2228-835X** that will be available at <http://wjst.wu.ac.th/index.php/wjst>.

You have to send following documents at [info@ardaconference.com](mailto:info@ardaconference.com) on or before 25<sup>th</sup> Nov 2020.

1. Final Paper | Ms Word .doc/.docx file
2. Proof of Registration | Scanned | Online Received Email

**Note: Please read carefully**

1. Above manuscript will be published within end of December 2020.
2. Walailak Journal of Science and Technology– Q3 is a SCOPUS Indexed Journal.
3. Author(s) will receive Publication information and Published Paper link through ARDA
4. You may see more about the journal at: <http://wjst.wu.ac.th/index.php/wjst>
5. You will receive Volume/ Issue information of your paper very soon.

Sincerely



Dr. Simpson Rodicks  
President,  
ARDA.





# High Technology Letters

ISSN NO : 1006-6748, IMPACT FACTOR : 2.7, PEER REVIEW,  
INTERNATIONAL JOURNAL

## CERTIFICATE OF PUBLICATION

Certificate ID:HTL/4979

This is to certify that the paper entitled

**“Automatic Segmentation of Music Genres using Tensorflow CNN  
and Music Information Retrieval Technique”**

Authored by

**Sahiti Cheguru**

From

**Gokaraju Rangaraju Institute of Engineering and Technology,  
Bachupally, Telangana, India**

Has been published in

**HTL JOURNAL, VOLUME 26, ISSUE 11, NOVEMBER - 2020**



  
Dr. ANAND PALLA Ph.D.,  
Editor-In-Chief  
HTL JOURNAL  
<http://www.gistx-e.cn/>



International  
Organization for  
Standardization



### Internship Completion Certificate

Date: 06-11-2020

This is to certify that **Ms. Sahiti Cheguru** has successfully completed internship in **Zeminds IT Solutions Pvt. Ltd.** Hyderabad from June 2019 to Jan 2020. She has worked on a real-time software development project. As the part of the project **Ms. Sahiti Cheguru** has built AI chatbots using AI Markup Language and Dependency Parsing algorithm. She has also developed opinion based sentiment analysis and brand analytics software for marketing campaigns using POS Tagging and Lexical SentiWordNet. She has exhibited exemplary coordination skills by associating with the web scrapping team and worked intensively on Selenium Web Driver and Scrapy web crawling framework while dealing with Dynamic WebPages. At the same time, was able to apply valuable knowledge and experience in facilitating the completion of the project.

During the internship, she demonstrated exceptional coding and problem solving skills with self motivated attitude to learn novel algorithms. Her performance exceeded expectations and was able to complete the project on time. We, on behalf of **Zeminds IT Solutions Pvt. Ltd.** congratulate and wish her all the best for future endeavors.

All the Best



Authorized Signatory  
Zeminds IT Solutions Pvt. Ltd.

Zeominds IT Solutions Pvt. Ltd.	Metro Opp: More Mega Store, #206, 2nd Floor, Fortune Signature, Above Pista House, beside JNTU, Kukatpally, Hyderabad, Telangana 500085
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<http://internships.mygoalstreet.com/>



<http://www.acstechnologies.co.in/>

Certificate Code: GSSIE2020MLB10031

## SUMMER INTERNSHIPS

### Internship Completion Certificate

Date: 16/7/2020

To whomsoever it may concern,

We are glad to inform you that "Sahiti Cheguru" had been pursued a 6 weeks Remote internship on "Machine Learning with Python" between 15-Apr-20 and 30-Jun-20. We hereby confirm that he/she has successfully completed the mentioned internship as part of GOAL STREET INTERNSHIPS.

During his/her Internship, he/she had worked under well-rounded mentors from the Industry for training in the particular discipline. Additionally, "Sahiti Cheguru" has also played a crucial role in working on a live "Capstone" project alongside fellow teammates to exhibit exemplary coordination and skill, and at the same time, was able to apply valuable knowledge and experience in facilitating the completion of the Project. The project, namely, "Sentiment analysis on COVID 19 Tweets using Python " stands testimony to the skills and knowledge obtained as part of their journey here at GOALSTREET.

Internships have been a great opportunity for any student to learn experience and evolve as a better professional in this ever-changing engineering stream. We, on behalf of ACS Technologies Ltd., and GoalStreet Team, congratulate and wish you a bright career.

All the Best

Authorized Signatory  
GoalStreet Internships

Note: This is a certificate copy, and the original copy can be found in the URL:  
[internships.mygoalstreet.com/SIE2020/Certificates](http://internships.mygoalstreet.com/SIE2020/Certificates)

ACS Technologies Ltd.  
in association with  
GOALSTREET

Address: 4F2, 5th Floor, Ballad Estates, Tarnaka, Hyderabad.  
Ph.No.: +91-9246818840,



5 Courses

How Google does Machine Learning

Launching into Machine Learning

Intro to TensorFlow

Feature Engineering

Art and Science of Machine Learning

Google Cloud

07/28/2020

Sahiti Cheguru

has successfully completed the online, non-credit Specialization

*Google Cloud Training*

# Machine Learning with TensorFlow on Google Cloud Platform

This five-course online specialization teaches course participants how to write distributed machine learning models that scale in Tensorflow, scale out the training of those models, and offer high-performance predictions. Also featured is the conversion of raw data to features in a way that allows ML to learn important characteristics from the data and bring human insight to bear on the problem. It also teaches how to incorporate the right mix of parameters that yields accurate, generalized models and knowledge of the theory to solve specific types of ML problems. Course participants experimented with end-to-end ML, starting from building an ML-focused strategy and progressing into model training, optimization, and productionalization with hands-on labs using Google Cloud Platform.

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/Z28KUFDGVLEV](https://coursera.org/verify/specialization/Z28KUFDGVLEV)



5 Courses

End-to-End Machine Learning  
with TensorFlow on GCP

Production Machine Learning  
Systems

Image Understanding with  
TensorFlow on GCP

Sequence Models for Time  
Series and Natural Language  
Processing

Recommendation Systems with  
TensorFlow on GCP

Google Cloud

07/28/2020

Sahiti Cheguru

has successfully completed the online, non-credit Specialization

# Advanced Machine Learning with TensorFlow on Google Cloud Platform

This specialization focuses on advanced machine learning topics using Google Cloud Platform where you will get hands-on experience optimizing, deploying, and scaling production ML models of various types in hands-on labs. This specialization picks up where "Machine Learning on GCP" left off and teaches you how to build scalable, accurate, and production-ready models for structured data, image data, time-series, and natural language text. It ends with a course on building recommendation systems. Topics introduced in earlier courses are referenced in later courses, so it is recommended that you take the courses in exactly this order.

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.

*Google Cloud Training*

Google Cloud Training

Verify this certificate at:  
[coursera.org/verify/specialization/DMBGHRRW6EYE](https://coursera.org/verify/specialization/DMBGHRRW6EYE)



9 Courses

- What is Data Science?
- Tools for Data Science
- Data Science Methodology
- Python for Data Science and AI
- Databases and SQL for Data Science
- Data Analysis with Python
- Data Visualization with Python
- Machine Learning with Python
- Applied Data Science Capstone



06/02/2020

## Sahiti Cheguru

has successfully completed the online, non-credit Professional Certificate

Rav Ahuja  
AI & Data Science  
Program Director  
IBM Skills Network

# IBM Data Science

In this Professional Certificate learners developed and honed hands-on skills in Data Science and Machine Learning. Learners started with an orientation of Data Science and its Methodology, became familiar and used a variety of data science tools, learned Python and SQL, performed Data Visualization and Analysis, and created Machine Learning models. In the process they completed several labs and assignments on the cloud including a Capstone Project at the end to apply and demonstrate their knowledge and skills.

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Verify this certificate at:  
[coursera.org/verify/professional-cert/2NAQ28FYU8AE](https://coursera.org/verify/professional-cert/2NAQ28FYU8AE)



4 Courses

Python for Data Science and AI  
Data Analysis with Python  
Data Visualization with Python  
Applied Data Science Capstone

06/23/2020

**Sahiti Cheguru**

has successfully completed the online, non-credit Specialization

# Applied Data Science

In this specialization learners developed and honed skills for practical data science and machine learning problems. The specialization included learning Python, as well as performing data analysis, and creating data visualizations using Python. Learners also completed a Capstone project to apply and demonstrate their newly acquired knowledge and skills.

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A handwritten signature in black ink.

Joseph Santarcangelo  
Senior Data Scientist  
IBM

A handwritten signature in black ink.

Alex Akison, Ph.D.  
Data Scientist

Verify this certificate at:  
[coursera.org/verify/specialization/WJA76VJJPVQ](https://coursera.org/verify/specialization/WJA76VJJPVQ)



4 Courses

Fundamentals of Scalable Data Science

Advanced Machine Learning and Signal Processing

Applied AI with DeepLearning

Advanced Data Science Capstone

06/03/2020

**Sahiti Cheguru**

has successfully completed the online, non-credit Specialization

# Advanced Data Science with IBM

As a coursera certified specialization completer you will have a proven deep understanding on massive parallel data processing, data exploration and visualization, and advanced machine learning & deep learning. You'll understand the mathematical foundations behind all machine learning & deep learning algorithms. You can apply knowledge in practical use cases, justify architectural decisions, understand the characteristics of different algorithms, frameworks & technologies & how they impact model performance & scalability.

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A handwritten signature in black ink.

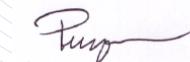
Tom Hanlon  
Training Director  
Skymind



Ilja Rasin  
Data Scientist  
IBM Watson Health



Romeo Kienzler  
Chief Data Scientist  
IBM Watson IoT



Max Pumperla  
Deep Learning Engineer



Niketan Pansare  
Senior Software Engineer  
IBM Research



Nikolay Manchev  
Senior Data Scientist  
IBM EMEA Data Science (2015-2019)

Verify this certificate at:  
[coursera.org/verify/specialization/J9RVCG429BBL](https://coursera.org/verify/specialization/J9RVCG429BBL)



6 Courses

Machine Learning with Python  
Scalable Machine Learning on Big Data using Apache Spark  
Introduction to Deep Learning & Neural Networks with Keras  
Deep Neural Networks with PyTorch  
Building Deep Learning Models with TensorFlow  
AI Capstone Project with Deep Learning

06/23/2020

## Sahiti Cheguru

has successfully completed the online, non-credit Professional Certificate

# IBM AI Engineering

Learners who have completed this 6 course Professional Certificate have a practical understanding of Machine Learning (ML) & Deep Learning (DL). They have technical skills to start a career in AI Engineering, and can:

- Implement ML algorithms including Classification, Regression, Clustering, and Dimensional Reduction using `scipy` & `scikitlearn`
- Perform ML on Big Data and deploy ML Algorithms and Pipelines on Apache Spark
- Demonstrate understanding of Deep Learning models such as autoencoders, restricted Boltzmann machines, convolutional networks, recursive neural networks, and recurrent networks
- Build deep learning models and neural networks using Keras, PyTorch and Tensorflow libraries
- Demonstrate ability to present and communicate outcomes of deep learning projects

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Romeo Kienzler  
Chief Data Scientist  
IBM Watson IoT

Joseph Santarcangelo  
Senior Data Scientist  
IBM

Alex Akison, Ph.D.  
Data Scientist

Saeed Aghabozorgi  
Sr. Data Scientist  
IBM

Verify this certificate at:  
[coursera.org/verify/professional-cert/2KKQM3D4GUKR](https://coursera.org/verify/professional-cert/2KKQM3D4GUKR)



5 Courses

Neural Networks and Deep Learning

Improving Deep Neural Networks: Hyperparameter tuning, Regularization and Optimization

Structuring Machine Learning Projects

Convolutional Neural Networks

Sequence Models



06/08/2020

**Sahiti Cheguru**

has successfully completed the online, non-credit Specialization

# Deep Learning

The Deep Learning Specialization is designed to prepare learners to participate in the development of cutting-edge AI technology, and to understand the capability, the challenges, and the consequences of the rise of deep learning. Through five interconnected courses, learners develop a profound knowledge of the hottest AI algorithms, mastering deep learning from its foundations (neural networks) to its industry applications (Computer Vision, Natural Language Processing, Speech Recognition, etc.).

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

Adjunct Professor  
Andrew Ng  
Computer Science

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Verify this certificate at:  
[coursera.org/verify/specialization/TXXYMDD7XYWF](https://coursera.org/verify/specialization/TXXYMDD7XYWF)



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



06/07/2020

## Sahiti Cheguru

has successfully completed the online, non-credit Specialization

# TensorFlow in Practice

In this specialization, you got a grounding in what you need to get started with TensorFlow: In Practice. The goal was to help you take the next steps, such as going deeper into understanding Machine Learning and the practice of understanding loss functions, optimizers and more, or perhaps you want to know more about neural networks and the different types of layers, from convolutions to recurrent or LSTM. Now that you have used some of them and seen the impact of different layer types in practice, you can go forward equipped to go deeper!



Laurence Moroney is an  
AI Advocate at Google  
Research

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Verify this certificate at:  
[coursera.org/verify/specialization/6ZGJT8ULSQ8D](https://coursera.org/verify/specialization/6ZGJT8ULSQ8D)



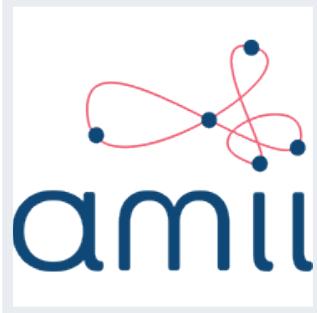
4 Courses

Fundamentals of Reinforcement Learning

Sample-based Learning Methods

Prediction and Control with Function Approximation

A Complete Reinforcement Learning System (Capstone)



07/08/2020

**Sahiti Cheguru**

has successfully completed the online, non-credit Specialization

# Reinforcement Learning

The Reinforcement Learning Specialization consists of 4 courses exploring the power of adaptive learning systems and artificial intelligence (AI). In this specialization, learners were taught to: Build a Reinforcement Learning system for sequential decision making; understand the space of Reinforcement Learning algorithms (Temporal-Difference learning, Monte Carlo, Sarsa, Q-learning, Policy Gradients, Dyna, and more); understand how to formalize a task as a Reinforcement Learning problem, and how to begin implementing a solution; understand how RL fits under the broader umbrella of machine learning. This learner is now prepared to take more advanced courses in AI or apply AI tools to real world problems.

A handwritten signature in black ink, appearing to read "A. White".

Adam White  
Assistant Professor  
Computing Science  
Faculty of Science

A handwritten signature in black ink, appearing to read "M. White".

Martha White  
Assistant Professor  
Computing Science  
Faculty of Science

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Verify this certificate at:  
[coursera.org/verify/specialization/Fw4PF465ZQTA](https://coursera.org/verify/specialization/Fw4PF465ZQTA)



3 Courses

Mathematics for Machine Learning: Linear Algebra  
Mathematics for Machine Learning: Multivariate Calculus  
Mathematics for Machine Learning: PCA

Imperial College London

06/24/2020

Sahiti Cheguru

has successfully completed the online, non-credit Specialization

# Mathematics for Machine Learning

A sequence of 3 courses on the prerequisite mathematics for applications in data science and machine learning. Successful participants learn how to represent data in a linear algebra context and manipulate these objects mathematically. They are able to summarise properties of data sets and map them onto lower dimensional spaces with principal component analysis. Finally they can solve optimisation problems and use this skill to train models for describing data such as simple neural networks.

Three handwritten signatures are shown in the top right corner. The first signature is "David Dye", the second is "Samuel J. Cooper", and the third is "Marc Deisenroth".

David Dye  
Professor of Metallurgy  
Department of Materials  
Imperial College London

Samuel J. Cooper  
Lecturer  
Dyson School of Design  
Engineering  
Imperial College London

Marc Deisenroth  
Senior Lecturer  
Department of  
Computing  
Imperial College London

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Verify this certificate at:  
[coursera.org/verify/specialization/S74EYSEL6Y6](https://coursera.org/verify/specialization/S74EYSEL6Y6)



4 Courses

Machine Learning Foundations:  
A Case Study Approach

Machine Learning: Regression

Machine Learning:  
Classification

Machine Learning: Clustering &  
Retrieval



06/01/2020

**Sahiti Cheguru**

has successfully completed the online, non-credit Specialization

# Machine Learning

Congratulations! This Certificate establishes that you have demonstrated proficiency in the exciting, high-demand field of Machine Learning through rigorous online coursework from leading Machine Learning researchers at the University of Washington. Through a series of practical case studies, you gained applied experience in major areas of Machine Learning including Prediction, Classification, Clustering, and Information Retrieval. You learned to analyze large and complex datasets, create systems that adapt and improve over time, and build intelligent applications that can make predictions from data. Take pride in your accomplishment and welcome to the global Machine Learning community!

A handwritten signature in black ink that reads "Emily Fox".

Emily Fox, Amazon  
Professor of Machine Learning, Statistics  
Carlos Guestrin, Amazon  
Professor of Machine Learning, Computer Science and Engineering

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Verify this certificate at:  
[coursera.org/verify/specialization/VWR2387U3QY9](https://coursera.org/verify/specialization/VWR2387U3QY9)



5 Courses

Introduction to Data Science in Python

Applied Plotting, Charting & Data Representation in Python

Applied Machine Learning in Python

Applied Text Mining in Python

Applied Social Network Analysis in Python



06/02/2020

**Sahiti Cheguru**

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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Christopher Brooks  
Research Assistant  
Professor  
School of Information

Kevyn Collins-Thompson  
Associate Professor  
School of Information

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

V. G. Vinod Vydiswaran  
Assistant Professor  
School of Information

Verify this certificate at:  
[coursera.org/verify/specialization/VNQGAX54GW6K](https://coursera.org/verify/specialization/VNQGAX54GW6K)



7 Courses

Introduction to Deep Learning

How to Win a Data Science Competition: Learn from Top Kagglers

Bayesian Methods for Machine Learning

Practical Reinforcement Learning

Deep Learning in Computer Vision

Natural Language Processing

Addressing Large Hadron Collider Challenges by Machine Learning



07/20/2020

**Sahiti Cheguru**

has successfully completed the online, non-credit Specialization

# Advanced Machine Learning

This specialization gives an introduction to deep learning, reinforcement learning, natural language understanding, computer vision and Bayesian methods. Top Kaggle machine learning practitioners and CERN scientists will share their experience of solving real-world problems and help you to fill the gaps between theory and practice. Upon completion of 7 courses you will be able to apply modern machine learning methods in enterprise and understand the caveats of real-world data and settings.

A handwritten signature in black ink that reads "All Team".

Eugeniy Sokolov,  
Zimovnov Andrey,  
Alexander Panin,  
Ekaterina Lobacheva,  
Nikita Kazeev,  
Marios Michailidis,  
Dmitry Ulyanov,  
Alexander Guschin,  
Mikhail Trofimov,  
Dmitry Altukhov,  
Daniil Polykovskiy,  
Alexander Novikov,  
Anna Kozlova,  
Anna Potapenko,  
Alexey Zobnin,  
Sergey Yudin

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Verify this certificate at:  
[coursera.org/verify/specialization/YAUMF6YLHKZF](https://coursera.org/verify/specialization/YAUMF6YLHKZF)

## CCNA Routing and Switching: Routing and Switching Essentials

The student has successfully achieved student level credential for completing CCNA Routing and Switching: Routing and Switching Essentials course administered by the undersigned instructor. The student was able to proficiently:

- Determine how a router will forward traffic based on the contents of a routing table.
- Explain how switching operates in a small to medium-sized business network.
- Use monitoring tools and network management protocols to troubleshoot data networks.
- Configure monitoring tools available for small to medium-sized business networks.
- Configure initial settings on a network device.
- Configure Ethernet switch ports.
- Implement VLANs.
- Implement static routing and RIPv2.
- Implement DHCP on a router.
- Implement network address translation (NAT).
- Implement access control lists (ACLs) to filter traffic.

### SAHITI CHEGURU

Student

### Gokaraju Rangaraju Institute of Engineering and Technology

Academy Name

India

Location



Laura Quintana  
VP & General Manager, Cisco Networking Academy

22 Sep 2019

Date

22 Sep 2019

Dear SAHITI CHEGURU,

Congratulations on completing the Cisco®**CCNA Routing and Switching: Routing and Switching Essentials** course as part of the Cisco Networking Academy® program. This hands-on, lab-oriented course has prepared you for tremendous career opportunities.

You have achieved student level credential for completing **CCNA Routing and Switching: Routing and Switching Essentials**, and acquired the following capabilities:

- Determine how a router will forward traffic based on the contents of a routing table.
- Explain how switching operates in a small to medium-sized business network.
- Use monitoring tools and network management protocols to troubleshoot data networks.
- Configure monitoring tools available for small to medium-sized business networks.
- Configure initial settings on a network device.
- Configure Ethernet switch ports.
- Implement VLANs.
- Implement static routing and RIPv2.
- Implement DHCP on a router.
- Implement network address translation (NAT).
- Implement access control lists (ACLs) to filter traffic.

In today's world, technical literacy is more important than ever, and Cisco is proud to provide you with the knowledge and skills necessary to build and maintain digital networks.

Keep up the great work and best wishes for continued future success.

Sincerely,



Chuck Robbins  
Chief Executive Officer Cisco Systems, Inc.

## CCNA Routing and Switching: Scaling Networks

The student has successfully achieved student level credential for completing CCNA Routing and Switching: Scaling Networks course administered by the undersigned instructor. The student was able to proficiently:

- Describe the operations and benefits of the Spanning Tree Protocol (STP).
- Configure and troubleshoot STP operations.
- Describe the operations and benefits of link aggregation and Cisco VLAN Trunk Protocol (VTP).
- Configure and troubleshoot VTP, STP, DTP, and RSTP.
- Configure and troubleshoot inter-VLAN routing.
- Configure and troubleshoot EtherChannel and HSRP.
- Configure and troubleshoot basic operations of routers in a complex routed network for IPv4 and IPv6.
- Configure and troubleshoot advanced operations of routers and implement OSPF and EIGRP routing protocols for IPv4 and IPv6.

### SAHITI CHEGURU

Student

**Gokaraju Rangaraju Institute of Engineering and Technology**

Academy Name

**India**

Location



Laura Quintana  
VP & General Manager, Cisco Networking Academy

**1 Dec 2019**

Date

1 Dec 2019

Dear SAHITI CHEGURU,

I want to congratulate you on completing the Cisco® **CCNA Routing and Switching: Scaling Networks** course as part of the Cisco Networking Academy® program. This hands-on, lab-oriented course has prepared you for tremendous career opportunities.

You have achieved student level credential for completing **CCNA Routing and Switching: Scaling Networks**, and acquired the following capabilities:

- Describe the operations and benefits of the Spanning Tree Protocol (STP).
- Configure and troubleshoot STP operations.
- Describe the operations and benefits of link aggregation and Cisco VLAN Trunk Protocol (VTP).
- Configure and troubleshoot VTP, STP, DTP, and RSTP.
- Configure and troubleshoot inter-VLAN routing.
- Configure and troubleshoot EtherChannel and HSRP.
- Configure and troubleshoot basic operations of routers in a complex routed network for IPv4 and IPv6.
- Configure and troubleshoot advanced operations of routers and implement OSPF and EIGRP routing protocols for IPv4 and IPv6.

In today's world, technical literacy is more important than ever, and Cisco is proud to provide you with the knowledge and skills necessary to build and maintain digital networks.

Keep up the great work and best wishes for continued future success.

Sincerely,



Chuck Robbins  
Chief Executive Officer  
Cisco

# PCAP: Programming Essentials in Python

During the Cisco Networking Academy® course, administered by the undersigned instructor, the student has studied the following skills:

- the universal concepts of computer programming (i.e. variables, flow control, data structures, algorithms, conditional execution, loops, functions, etc.)
- developer tools, developer tools and the runtime environment;
- the syntax and semantics of the Python language;
- the fundamentals of object-oriented programming and the way they are adopted in Python;
- the means by which to resolve typical implementation problems;
- the writing of Python programs using standard language infrastructure;
- fundamental programming techniques, best practices, customs and vocabulary, including the most common library functions in Python 3.

This Statement of Achievement acknowledges that during the course PCAP: Programming Essentials in Python, the student has been able to accomplish coding tasks related to the basics of programming, and understands the programming techniques, customs and vocabulary used in the Python language.

By completing the course, the student is now ready to attempt the qualification PCAP – Certified Associate in Python Programming certification, from the OpenEDG Python Institute.

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## **SAHITI CHEGURU**

Student

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## **Gokaraju Rangaraju Institute of Engineering and Technology**

Academy Name

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## **India**

Location

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**28 Apr 2020**

Date



Laura Quintana  
VP & General Manager, Cisco Networking Academy



# CPA: Programming Essentials in C++

During the Cisco Networking Academy® course, administered by the undersigned instructor, the student has studied the following skills:

*Laura Quintana*

Laura Quintana  
VP & General Manager, Cisco Networking Academy

This Statement of Achievement is to acknowledge that during the course CPA: Programming Essentials in C++, the student has been able to accomplish coding tasks related to the basics of programming in the C++ language, and understands the fundamental notions and techniques used in object-oriented programming.

By completing the course, the student is now ready to attempt the qualification CPA – C++ Certified Associate Programmer Certification, from the C++ Institute.

## SAHITI CHEGURU

Student

## Gokaraju Rangaraju Institute of Engineering and Technology

Academy Name

India

Location

16 Mar 2020

Date

## SAHITI CHEGURU

Instructor



# CPP: Advanced Programming in C++

During the Cisco Networking Academy® course, administered by the undersigned instructor, the student has studied the following skills:

Laura Quintana  
VP & General Manager, Cisco Networking Academy

This Statement of Achievement is to acknowledge that during the course CPP: Advanced Programming in C++, the student has been able to accomplish coding tasks related to the more advanced C++ topics such as templates (template mechanism, reading, using and creating template functions and classes), the Standard Template Library (including the IO part), and solving programming problems with STL predefined classes and methods.

By completing the course, the student is now ready to attempt the qualification CPP – C++ Certified Professional Programmer Certification, from the C++ Institute.

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## SAHITI CHEGURU

Student

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## Gokaraju Rangaraju Institute of Engineering and Technology

Academy Name

---

India

Location

---

28 Apr 2020

Date

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## SAHITI CHEGURU

Instructor



# AWARD *of* ACHIEVEMENT

PRESENTED TO

**CHEGURU SAHITI**

FOR SUCCESSFULLY COMPLETING THE ORACLE ACADEMY  
**Database Programming With SQL**  
FINAL EXAM

27th Feb 2019

D.k.Madhuri  
Oracle Academy Instructor

Chief Executive Officer  
Telangana Academy for Skill and Knowledge  
ITE & C Department, Govt of Telangana

# AWARD *of* ACHIEVEMENT

PRESENTED TO

**Sahiti Cheguru**

FOR SUCCESSFULLY COMPLETING THE ORACLE ACADEMY

**Database Design**

FINAL EXAM

29th June 2019

D-K Madhuri  
**Oracle Academy Instructor**



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**Chief Executive Officer**  
Telangana Academy for Skill and Knowledge  
ITE & C Department, Govt of Telangana