#### **VARUN TOTAKURA**

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## **EDUCATIONAL QUALIFICATION:**

Degree/Certificate	Marks Obtained (%)	Name of the College/ School	University/Board	Place	Year
MS in Computer Science	-	Florida State University	Florida State University	Tallahassee, Florida	2024*
B. Tech (Computer Science)	8.91	Guru Nanak Institutions Technical Campus	JNTU – Hyderabad	Hyderabad, India	2020
12 <sup>th</sup>	91.4%	Narayana Junior College	BIE-TS	Hyderabad, India	2016
10 <sup>th</sup>	9.2	Narayana Concept School	SSC	Hyderabad, India	2014

## **PROFESSIONAL EXPERIENCE:**

Graduate Research Assistant – Dr. Sonia Haiduc, The Serene Lab, Florida State University – 15<sup>th</sup> August 2022 to Present:

• Working on development of a Natural Language Processing Solution which helps developers

Graduate Research Assistant – Dr. Shayok Chakraborty, Florida State University – 19<sup>th</sup> August 2022 to Present:

• Working on development of Computer Vision Solution which would aid aged/elderly people

System Engineer – Tata Consultancy Services, Hyderabad, Telangana – 23<sup>rd</sup> July 2020 to 22<sup>nd</sup> July 2022:

- Worked as ServiceNow Developer
- Worked on development automations and integrations in ServiceNow
- Part of the NextGenAMS Program which is a special initiative to identify and automate the routine tasks.
- Currently Developing Chat-bots and some automations as a part of NextGenAMS and became a team leader for the group of people who are in NextGenAMS.
- For my quick learning and adapting skills I was awarded with "Learning Achievement Award".
   I have learned lot of technologies like ServiceNow, SharePoint, Power Automate, Azure, Google during my work.

## **ACADEMIC & PROFESSIONAL PROJECTS:**

**Developments of Intelligent Chatbots and Automations using Machine Learning - NextGenAMS:** 

• **Duration:** September, 2021 – Present

• Organization: Tata Consultancy Services

- Description: To Develop Intelligent Chatbots which can do necessary operations by itself by getting inputs from the user and to develop necessary automations using Machine Learning to reduce man power
- Outcome: Increase productivity and improve efficiency of product delivery
- Team Size: 12
- Role: Team Leader, Developer
- Tools Used: Machine Learning, Python, Azure, ServiceNow, REST Protocol

# ServiceNow to ServiceNow Integration using REST:

- Duration: July, 2021 September, 2021
   Organization: Tata Consultancy Services
- **Description:** To integrate two ServiceNow instances using REST Protocol
- **Outcome:** With the integration, automatically the data will be swivelled from one instance to another
- Team Size: 9
- Role: Developer, Primary Contact
- Tools Used: ServiceNow, REST Protocol

## Third-Party to ServiceNow Integration using REST:

- **Duration:** April, 2021 June, 2021
- Organization: Tata Consultancy Services
- **Description:** To integrate a third-party software with ServiceNow instance using REST Protocol
- **Outcome:** Automatic creation and updating of incidents in both the instances when certain conditions met
- Team Size: 9Role: Developer
- Tools Used: ServiceNow, REST Protocol

## **ServiceNow Email Integration:**

- Duration: February, 2021 March, 2021
   Organization: Tata Consultancy Services
- **Description:** To automate the creation and updating of incidents when emails are received from specific email ID's
- Outcome:
- **Team Size:** 9
- Role: Developer
- Tools Used: ServiceNow

## **Brain Tumor Detection using Convolutional Neural Networks:**

- Duration: November, 2019 March, 2020
- Organization: Guru Nanak Institutions Technical Campus
- **Description:** Collect Data Brain Tumor Symptoms to categorize the symptoms and then Classify the Brain Tumor using Convolutional Neural Networks
- **Outcome:** Helps people to know the brain tumor in advance using symptoms which helps them to get a good treatment

• Team Size: 1

• Role: Developer, Author

Tools Used: Python, Machine Learning, PHP, MySQL, HTML, JavaScript, CSS, Bootstrap

### **INTERNSHIPS & TRAININGS:**

Completed a Coursera course "Neural Networks and Deep Learning" from deeplearning.ai taught by Andrew NG and achieved 100% grade in September, 2020. Credential ID: VQBCURE6DJUJ.

- Completed a Coursera course "Applied Machine Learning in Python" from University of Michigan and achieved 99% grade in September, 2020. Credential ID: CNAUG3TVGQ3Z.
- Completed a Coursera course "End-to-End Machine Learning with TensorFlow on GCP" from Google Cloud and achieved 95% grade in September, 2020. Credential ID: YZR5MXPKLA6R.
- Completed a one-week training and Internship with Hyderabad City Police at Hyderabad Police Cyber Cell and graded with 'A+'. It is a Cyber Smart Program 2019 organized by Commissioner of Police Hyderabad Mr. Anjani Kumar (IPS) and Co-Founder/Director Hachershala Mr. Rakshit Tandon (Cyber Security Expert).
- Completed a one-month training and internship with **Imparta** at Hyderabad in diversified fields: **Ethical Hacking, IOT application development, Web Development**.
- Completed a five-months internship in **Johan Brown Pvt Ltd** at IT Decode park in Guru Nanak Institutions. The internship was about E-Book design and development.
- Completed a Coursera course "Customer Analytics" from University of Pennsylvania achieved 92% grade in February, 2018. Credential ID: 38HHL76S9CET.
- Completed a Coursera course "Big Data Analysis with Scala and Spark" and achieved 100% grade in January, 2018. Credential ID: 3UCG5A56H775.

## **RESEARCH WORKS:**

- A book chapter on "Predicting the Rate of Transmission of Viral Diseases Using ARIMA" is going to be published in Springer – Studies in Big Data, Vol. 89, Advanced Soft Computing Techniques in Data Science, IoT and Cloud Computing.
- A research paper on "Symptomatically Brain Tumor Detection Using Convolutional Neural Networks" was published in IOP Conference Series Materials Science and Engineering (Web of Science, & Scopus Indexed), Volume 1022, 1st International Conference on Computational Research and Data Analytics (ICCRDA 2020), 24th October 2020 - DOI: 10.1088/1757-899X/1022/1/012078.
- A research paper on "Improved Safety of Self-Driving Car using Voice Recognition through CNN" was published in IOP Conference Series Materials Science and Engineering (Web of Science, & Scopus Indexed), Volume 1022, 1st International Conference on Computational Research and Data Analytics (ICCRDA 2020), 24th October 2020 - DOI: 10.1088/1757-899X/1022/1/012079.
- A research paper on "Predicting the Rate of Transmission of Viral Diseases Using GARCH" is going to be published in Springer – Lect. Notes Electrical Eng., Vol. 789, Emerging Research

- in Computing, Information, Communication & Applications DOI: 10.1007/978-981-16-1338-8.
- A research paper on "TRAFFIC SIGN BOARD DETECTION BY SELF DRIVING CARS USING TRANSFER LEARNING" was published in International Journal of Creative Research Thoughts (Ref= IJCRT\_2012227) Volume 8, Issue 12, December 2020 Edition, pages 2184-2191.
- A research paper on "A Deep Learning Approach for Cardiac Arrhythmia Detection" was published in International Journal for Research in Applied Science & Engineering Technology (Ref= IJRASET32399) Volume 8, Issue 12, December 2020 Edition, pages 77-81.
- Published a research Paper which was entitled as "Versatile Learning Models and Applications of Computer Vision: A Survey" in the month of December – 2020 in Journal of Innovation in Information Technology, Volume – 4, Issue – 2, pages 4-9.
- A research paper on "Recognition of Handwritten Characters using Deep Convolutional Neural Network" was published in International Journal for Research in Applied Science & Engineering Technology (Ref= IJRASET30815) Volume – 8, Issue – 8, August 2020 Edition, pages 16-20.
- A research paper on "Concepts of Ethical Hacking: A Survey" was published in International
  Journal of Creative Research Thoughts (Ref= IJCRT\_193382) Volume 8, Issue 4, April 2020
  Edition, pages 1279-1283.
- A research paper on "An Integrated Approach to Sentiment Analysis using Machine Learning Algorithms" was published in International Journal for Research in Applied Science & Engineering Technology (Ref= IJRASET27486) Volume 8, Issue 4, April 2020 Edition, pages 427-436.
- A research paper on "Prediction of Stock Trend for Swing Trades using Long Short-Term Memory Neural Network Model" was published in International Journal of Scientific & Technology Research (Scopus Indexed) (Ref= IJSTR-0320-31114) Volume 9, Issue 3, March 2020 Edition, pages 1918-1923.
- A research paper entitled as "Prediction of Animal Vocal Emotions using Convolutional Neural Network" was published in International Journal of Scientific & Technology Research (Scopus Indexed) (Ref=IJSTR-0120-28358) Volume – 9, Issue – 2, February 2020 Edition, pages 6007-6012.
- Published a research Paper which was entitled as "Selection of Stocks using Relative Strength Index (RSI) in Indian Stock Market for Swing Trades" in the month of August 2019 at 7<sup>th</sup> International Conference on Innovations in Computer Science and Engineering hosted by Guru Nanak Institutions.

### **TECHNICAL SKILLS:**

**Programming Languages:** Python, C, Java, C++

Python Modules: Tensorflow, OpenCV, Numpy, Pandas, Matplotlib, Scipy, Scikit-

learn, PyAutoGUI, LXML, Pygame, Beautiful Soap, Selenium

Databases: MySQL, NoSQL

Scripting Languages: HTML, CSS, JavaScript, PHP

Tools: ServiceNow, Power Automate, Azure, Google Cloud, Google

Colab, Jupyter Notebook, Spyder, Visual Studio, R Studio, Brackets

and Adobe Photoshop

Operating Systems: Windows, Ubuntu (Linux)

## **AWARDS & ACHIEVEMENTS:**

- Star of the Month Award by Tata Consultancy Services for excellent performance for which customer has appreciated in October, 2021.
- On the Spot Award by Tata Consultancy Services for excellent performance in NextGenAMS program in July, 2021.
- On the Spot Award by Tata Consultancy Services for developing an automation for NextGenAMS program in April, 2021.
- On the Spot Award by Tata Consultancy Services for excellent performance in developing ServiceNow integrations in February, 2021.
- Awarded with 2<sup>nd</sup> Topper Rank for my excellence in academic studies and for achieving top score in 2-2 of Bachelor of Technology (B. Tech) by Guru Nanak Institutions on the Guru Nanak Institutions College Annual Day Celebrations 2019.

### **EXTRACURRICULAR ACTIVITIES:**

 Organized and Volunteered the Springer publication Technical Sessions and Conference at Guru Nanak Institutions, Hyderabad. The conference is an International Conference conducted by Guru Nanak Institutions (ICICSE - 2018).