

Nikita Chorghe

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EDUCATION

- The University of Texas at Dallas** Richardson, TX May 2023
Masters in computer science GPA: 3.67
Relevant Courses: Design and Analysis of Algorithms, Database Design, Web Programming Languages
- The University of Mumbai, Ramrao Adik Institute of Technology** Mumbai, India May 2020
Bachelor of Technology in Computer Engineering GPA: 9.06/10
Relevant Courses: Structure Programming Approach, Data Structure, Analysis of Algorithms, Database Management Systems, System Programming, and Compiler construction, Software Engineering

TECHNICAL SKILLS

- **Languages:** C/C++, Python, JavaScript, HTML/CSS, jQuery, Node.js, Express.js
- **Libraries:** pandas, SciPy, NumPy, Matplotlib, OpenCV, PyTorch, TensorFlow, Keras, Scikit-Learn
- **Database:** MySQL, Oracle SQL, MongoDB
- **Miscellaneous:** Firebase, Git, MS Excel

EXPERIENCE

- Design Factory, Software Developer** Dec 2020 – June 2021
- Led a team of 7 to develop and maintain 20+ webpages as per client requirements and implemented them using 3 languages HTML, CSS, and JavaScript
 - Performed cohort data analysis and devised an intuitive dashboard to analyze monthly visits to the website by collaborating with cross-functional teams and made necessary changes to improve the website traffic by 20%
 - Improved a database using 1000+ records and integrated it with the website using PHP
- SDG-RAIT, Software Developer Intern** May 2020 – June 2020
- Designed a Certificate Generation system that allowed digital automation of certificate generation with more than 20+ templates using OpenOffice API.
 - Formulated and administered the project planning using management tools (Trello) and coordinated among the team consisting of 4 members
 - Participated in the 6 phases of development, i.e., coding, compilation, unit testing, integration, packaging, and deployment of software

PROJECTS

- Image Captioning with Deep Networks | Python, CNN, RNN, LSTM** Sep 2021 – Nov 2021
- Proposed a technique to generate a caption for an image using 2 algorithms: CNN to encode images into latent space and RNN (2 algorithms: Long short-term memory (LSTM) and Gated Recurrent Unit (GRU)) to decode features
 - The model developed for the task had two parts which contain Image Feature/Object Detector to extract key objects and features from the image and Natural Language Generator to determine a caption in English language using the image features with 93% accuracy
- Detection and Prevention of Cyber Attacks on Mobile Networks | A3, A5, A8, Scikit-learn** Jan 2020 – May 2020
- Defined a NIST based framework to detect and prevent significant attacks on mobile networks such as IMSI, Identity theft attacks, and SMS phishing to protect the security of mobile users
 - Improved the authentication procedure by calculating the Cell IDs in a particular region and verifying it with the registered Cell Id's to identify and block malicious attackers from performing MITM attacks
 - Applied Machine algorithms to identify and classify URLs as phishing URLs and block user access to malicious URLs with an accuracy of 97%
- Human Expression Detection | SVM, NumPy, cv2, Scikit-learn** May 2019 – Dec 2019
- Human Facial expressions of people of various ages, ethnicity, and gender were extracted from videos and processed
 - SVM with a non-linear classifier was used to recognize new facial expression and categorize it into one of the 6 emotions (happiness, sadness, disgust, surprise, fear, and anger)
- Audio Feature Extraction | K-Means algorithm, TensorFlow, NumPy, Pandas, Matplotlib** Jan 2019 – May 2019
- Extracted audio data in the form of data frames using Audio Basic IO and created a sample file
 - Extracted all the features from audio signals using Audio Feature Extraction
 - K means algorithm was used to train the model after determining the audio frequency from audio signals

PROFESSIONAL HIGHLIGHTS

- Presented "Identity Theft Prediction Using Game Theory" paper at ICACC-2020
- Published "Identity Theft Prediction Using Game Theory" at ITM Web of Conferences, Jul '20