

YUG DEEPAK RAJANI

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EDUCATION

Northeastern University , Boston, MA	Jan 2023 - Dec 2024
Khoury College of Computer Sciences	GPA: 4.0 / 4.0
Candidate for Master of Science in Computer Science	
Relevant coursework: Program Design Paradigms, Algorithms, Database Management Systems	
Dharmsinh Desai University , Nadiad	Jun 2017 - May 2021
Bachelor of Technology in Computer Engineering	GPA: 4.0 / 4.0

TECHNICAL SKILLS

Fundamental Concepts:	Design Patterns, Data Structures and Algorithms, OOP Concepts, REST APIs
Programming Languages:	Java, Python, C, C#, C++, JavaScript, Golang
Web Technologies:	Angular, NodeJS, HTML5, CSS, Bootstrap, Flutter
Databases:	MySQL, MongoDB, SQLite, Elastic, Firebase, Google Cloud's BigQuery
Tools and Frameworks:	Elasticsearch, Logstash, Kibana, Splunk, Keras, Tensorflow, NLTK, Git, Jira, Confluence, Docker

WORK EXPERIENCE

Northeastern University , Boston, MA	
Graduate Teaching Assistant <i>Database Management Systems, MySQL, Python, Java</i>	Sep 2023 - Dec 2023
<ul style="list-style-type: none">Guiding a class of over 280 students in building and troubleshooting solutions with Database Management Systems (CS 5200).Conducting regular office hours to support students in grasping concepts and providing comprehensive feedback to track progress.	
Graduate Research Assistant <i>Python, Shell Scripting, Linux</i>	May 2023 - Aug 2023
<ul style="list-style-type: none">Building Shell and Python scripts to facilitate experiments for 5G network performance analysis and measurements.Coordinating and carrying out experiments to gather 5G mm wave performance data in Boston to analyze it using Python.	
Graduate Teaching Assistant <i>Database Design, MySQL</i>	May 2023 - Jun 2023
<ul style="list-style-type: none">Mentored a class of 160 students in developing and debugging solutions aligned with Database Design (CS 3200).Regularly held office hours to assist students with conceptual understanding, and providing students with detailed feedback.	
Crest Data Systems , Ahmedabad, India	
Software Engineer <i>Python (FastAPI), ELK Stack, Golang</i>	May 2021 - Oct 2022
<ul style="list-style-type: none">Collaborated with cross-functional teams across 2 Business Units (Security Analytics and Automation, Product and Solutions).Optimized Cisco SDWAN report generation feature using FastAPI async/await mechanism, enabling 2+ concurrent user operations.Developed 10+ Elastic integrations on ELK stack for Security and Observability, including Filebeat and Metricbeat modules.Led and mentored technological onboarding of a team of 6 new hires, in the technology of ELK and provided hands-on training.	
Software Engineer Intern <i>Python (Flask), Splunk, PostgreSQL</i>	Dec 2020 - May 2021
<ul style="list-style-type: none">Implemented back-end for web application to simplify and automate migration of 3 types of assets from Elasticsearch to Splunk.Designed a Selenium script to automate verification of ingested data into visualizations thereby increasing efficiency by 30%.Coordinated with 5+ team leads for improving performance of Pagerduty and Slack alert migration functionality.Created RESTful APIs, performed integration and unit testing using PyTest and Selenium, achieving 10% higher test coverage.	

PROJECTS

Image Manipulation & Enhancement <i>Java, Swing, Object Oriented Design</i>	Mar 2023 - Apr 2023
<ul style="list-style-type: none">Crafted a GUI-based image editor, implementing a blend of MVC architecture, design patterns, and adherence to SOLID principles.Tested the system extensively using Test Driven Development Methodology to ensure intended behaviour with >80% test coverage.	
Speech Recognition & Voice Detection <i>Python (Django), TensorFlow (Keras), Bootstrap, JavaScript</i>	Mar 2020 - Apr 2020
<ul style="list-style-type: none">Engineered a speaker identifier by extracting 40-dimensional MFCCs from speech frames using a neural network.Brainstormed and built a Keras (TensorFlow) model using MFCC features for speech recognition and voice detection, achieving >95% accuracy in speaker identification, and designed a user interface for the application providing an intuitive user experience.	
Agriculture Information System <i>ASP.NET MVC, Entity framework, CSS, JavaScript, Bootstrap</i>	Oct 2019 - Nov 2019
<ul style="list-style-type: none">Developed an ASP.NET MVC web app with Entity framework, authentication, and admin features with <200ms response time.Worked in team to incorporate CSS, JavaScript, and Bootstrap to develop engaging front end, hosted project on Azure Cloud.	
Health Fitness Management Application <i>Angular, MongoDB, NodeJS, ExpressJS, Typescript, AJAX</i>	Oct 2019 - Nov 2019
<ul style="list-style-type: none">Created a web app using MEAN Stack to track health and workouts, added features for workout, diet and trainers management.Integrated platform connecting users with certified trainers, providing opportunities for personalized training and user engagement.	