VIJAYA TEJA RAYAVARAPU

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EDUCATION

Northeastern University, Boston, MA — Jan. 2021 – present
Khoury College of Computer Sciences — Expected graduation: December 2022
Candidate for a Master of Science in Computer Science (CGPA: 4/4)
Related courses: Natural Language Processing, Foundations of Artificial Intelligence, Algorithms

National Institute of Technology, Warangal — April 2017
Bachelor of Technology in Electrical and Electronics Engineering with First division
Related courses: Problem Solving and Computer Programming, Data Structures

TECHNICAL KNOWLEDGE

Languages:	JavaScript, TypeScript, Python, Java, C#, C++, Dart, Go, ShellScript
Databases:	MySQL, MSSQL, Oracle SQL, MongoDB, DynamoDB
Technologies:	Angular, React.js, Node.js, HTML, CSS, Flutter, Microsoft .NET, Spring, Jenkins, Git, Docker, JMeter
Cloud Technologies:	EC2, Lambda, Route 53, ELB, CFT, ACM, RDS, Google App Engine, Google Compute Engine

WORK EXPERIENCE

Software Engineer, Fidelity Investments, Chennai, India — July 2017 – December 2020

- Played a crucial role in migration of a .NET application from internal servers to AWS, by working with AWS EC2, Lambda, RDS, Route 53, ELBs, CFTs and ACM.
- Developed numerous REST APIs and functionalities with NodeJS, .NET framework and Spring.
- Created multiple front-end user experiences using Angular, JavaScript and C# for new feature additions.
- Spearheaded the development of multiple automation jobs using ShellScript, NodeJS and Jenkins.
- Built test suites using JMETER and selenium for automated testing of APIs and UI, it brought down time taken to run tests from around 2 hours to less than 45 seconds.
- Solely created CI/CD pipelines using Jenkins and UrbanCode Deploy for multiple web applications.
- Coordinated and built a pipeline using C#, SSIS, SSDT, SSRS and SQL queries for automating monthly reports generation, bringing down report generation time to under a minute from 50 hours a month.

PROJECTS

Empirical analysis of micro-architecture design decisions — May 2021 – August 2021

- Performed quantitative analysis on the impact of choice of programming language and scaling parameters used for APIs deployed on Google App Engine on the performance to price ratio and latencies as a **research assistant**.

Citadel Datathon Summer 2021 (Invited by Citadel) — July 2021

- Pre-processed multiple data sets containing 500K - 1.2M rows and performed extensive EDA. Extracted the most impacting features by computing Pearson correlation coefficients and carrying out stepwise regression. Built an MLP Regression model leveraging this data for optimal hotel price prediction and evaluated using RMSE.

Sanskrit to English Neural Machine Translation (https://github.com/rvteja24/sans_eng_nmt) — January 2021 – April 2021

- Developed Node.js script for scraping the web, preprocessing and saving Sanskrit-English sentence pairs in csv file.
- Implemented a Transformer NMT model from scratch in pytorch with various parameters tuned to suit the use-case and achieved an average BLEU score of 9.116 with only 38K sentence pairs.

Poker Agent using enhanced self-play techniques (https://github.com/rvteja24/pokerAgent) — January 2021 – April 2021

- Built a 6-player poker agent which made use of custom designed algorithms to generate strategies through self-play.
- Implemented own variants of rotation, abstraction, regret minimization and decision-making algorithms which are used during training and real-time gameplay.

CoLLearn, Appointment scheduling and interaction platform — August 2020 – November 2020

- Developed prototype of a mobile application using Flutter, Node.js and MySQL for interaction between individuals and appointment scheduling for learning/teaching.

ACHIEVEMENTS/ACTIVITIES

- **Graduate Teaching Assistant** for Graduate level web development course at Khoury College focusing on MERN stack.
- Runner up in GSLV award competition conducted by Indian Space Research Organization (ISRO).
- Elected General Secretary and Branch Representative of students' council executive body at National Institute of Technology (NIT) Warangal – coordinated and resolved issues of a student mass of 5000 students.