RAJ MISHRA

Dallas,TX | raj.mishra@utdallas.edu | +1 (469) 674-8153 | linkedin.com/in/rajmishra1995/
About me : https://lordphoenix.github.io/ | Github : https://github.com/lordphoenix/ | Blog : https://lordphoenix.github.io/blog/

EDUCATION

The University of Texas at Dallas, *Richardson, TX*   August 2021 - June 2023
Master of Science in Computer Science
Courses : Operating Systems, Discrete Structures, Machine Learning

Birla Institute of Technology, Mesra, *Ranchi, India*   August 2014 - June 2018
Bachelor of Engineering in Electronics and Communication
Courses : Computer Networking, Neural Network and Fuzzy Systems, Probability Model and Stochastic Processes

SKILLS

Languages: C/C++, Java, Python, SQL
Frameworks: Flask, REST/RESTful, Tesseract-OCR, Selenium, JUnit
Tools: Vi/VIM, Putty/SSH, DBeaver
OS: Linux Red Hat Enterprise 7.x, Ubuntu, Windows, MacOS
CI/CD: Git/Github, Jenkins, Github CI, XLDeploy
Machine Learning: Neural Networks (CNN, RNN, LSTM/GRU), Matrix calculus, Theano, Pandas, Numpy
Basic Exposure: Azure, Heroku, Spring, Bash
Misc: YAML and Heira, CMake, Jira, XML(XSD) schema, Data Structures and Algorithms

EMPLOYMENT HISTORY

Specialist Software Engineer, Société Générale, *Bengaluru, KA, India*   July 2018-August 2021
- Developed OCR platform based upon Tesseract which replaced Abbyy, saving costs of around EUR 58K
- Built a web-automation tool replacing Automation Anywhere across business units, saving licence costs by 12.5%
- Automation of production checks using python and selenium, reducing workload by 100 Mandays
- Implemented Non Regression Test suite using Cucumber, reducing production incidents by a drastic 45%
- Responsible for configuration management of all onboarded application in our perimeter
- Remodeled reporting of warrant deals which saves around EUR 120K every year towards live trade costs
- Implementation of North America re-architecture project harmonizing trade reports across asset classes
- Mentored and guided many new joiners through the project and core modules of the application
- Migrated application (specific features) owned by a different team to our cluster, reducing dependency by 100%

PROJECTS

- **CANN** (C++ Artificial Neural Network)   January 2021 - Present
  - Out of personal interest built an autoencoder artificial neural network with Backpropagation learning in C++
  - Added feature of loading and saving weights and biases
  - Built configuration management support for hyperparameters with JSON
  - Did setup of automated make build with Github CI
  - Future Scope: Expanding the project to support different kinds of Neural Networks such as CNN and RNN
  - Project URL: https://github.com/lordphoenix/cann
- **News Aggregator**   May 2020 - July 2020
  - Built a website which displayed news from various online sources
  - Configured a tomcat server running ubuntu to host the website
  - Setup a cron job to regularly fetch data from web pages and update the database
  - Future Scope: Using Machine Learning to prioritize and show contents based upon preferences
  - Technologies Used : Python, Web Scraping using Beautiful Soup, SQL Database, php, Bootstrap

ACHIEVEMENTS AND EXTRACURRICULARS

- Secured 12th position in competitive coding competition conducted across Société Générale
- Mentored a group of 3 sophomores for competitive programming during my senior year at BIT Mesra
- Global rank of 37 in Codechef Snackdown 2016 Pre-Elimination Round B
- Guitarist for college band "7th Mile", performed at various live events on campus during my undergrad
- Core Leading members of organizing committee for on campus college festivals during undergrad
- High school topper for Chemistry and Mathematics in All India Senior School Certificate Examination, 2014