KUNAL MEHROTRA

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Creative and results-oriented software engineer with 2+ years of experience working with tech companies. Experienced with all stages of the development cycle for dynamic web and ML projects and agile development principles. Currently pursuing my Master's in Computer Science Specialization.

EXPERIENCE

TATA CONSULTANCY SERVICES (TCS)   *Mumbai, India*
Systems Engineer   *Oct 20 - Jul 21*

- Ideated and **developed** prototype for client Banking system using React and Spring boot which would increase User readability and response times by changing their database Structure, normalizing the tables for easy maintenance and future schema creation which was done using MySQL and Unix.

    ING BANK, NETHERLANDS – CONTRACT (TCS)   *Amsterdam, Netherlands*
    Advanced-Ops Engineer   *Dec 20 - Jul 21*

- Helped in keeping Prod Environment in a stable state by **maintaining** backend Linux RHEL servers, daemon allocation, handling critical files, handling component configurations, version upgrades, and patching of servers for ION products Anvil and Arc.
- Prevented **audit penalties** by performing IT-Risk tasks like updating licensing certificates, finding, reporting, and fixing yellow and red vulnerabilities having SOX(financial) value thus keeping the controls in a valid state while collaborating in an Agile setup.

ACME IN TECH   *Lucknow, India*
Full Stack Engineer   *Apr 20 - Sep 20*

- Increased **Revenue** by 30% by reducing dependency and saving the commission given to freelancing platforms by leading and developing a Marketplace E-commerce platform for freelancers in a three-tier architecture model using MySQL, PHP, Laravel in the backend and WordPress, Bootstrap, jQuery in the frontend.
- Improved **reliability** and server response time by distributing traffic across servers by using Amazon's EC2 instances, auto-scaling, and Load Balancers.

BARC-BRNS SRM ML LAB   *Chennai, India*
Research Assistant   *Jan19 - May 20*

- Proposed idea to BARC by creating an X-ray baggage scanner for detecting illegal items using Deep learning, based CNN model using PyTorch which provided colored X-ray images with an accuracy metric of 96%.
- Attained better **scalability** and **portability** by deploying model as Flask app in PYNQ-Z1 and Nvidia Jetson boards.

PROJECTS

AROGYA - https://github.com/kunal1197/arogya-android   *Feb 2020*

- Built a **fitness** android app using Kotlin, all the user form Sign up, profile and history sections were made using Node.js and MongoDB to provide information about the calorific value of food from its image which was uploaded using Firebase to the REST API which in turn passed it to the model having **Convolutional Neural Network** built using Keras and Flask that had an **accuracy** of 89.66%.

DRISHTI - https://github.com/kunal1197/breaking-bits   *Apr 2020*

- Trained model for early detection of malaria using **Deep Neural Networks** with PyTorch and deployed it as a **web application** using ES6, jQuery, and flask with an accuracy of 92%.

SRM BRAIN - https://github.com/kunal1197/srm-brain   *Sep 2020*

- Created a web app that provided production-ready **APIs** to students for several Deep Learning tasks using Python, Flask for backend and jQuery, Bootstrap and JavaScript for frontend, which improved student's **lookup** time by 25% as compared to building and training their own models.

SAVE.AI - https://github.com/kunal1197/breaking-bits-mozohack   *Apr 2019*

- Developed an **anti-cyber** bullying app which protected users by identifying **malicious** attacks on **Twitter** and **Facebook**, the model was based on sentiment analysis, which would mark the post/tweet as a red flag above a certain set threshold. Built using jQuery, JavaScript for frontend, Python, TensorFlow for model, and Flask for deployment.

EDUCATION

Northeastern University, Khoury College of Computer Sciences   *Boston, USA*
Master of Science in Computer Science   *Expected May 2023*

- Program Design Paradigms, Database Management Systems, Algorithms, Intro to Data Management and Processing   *GPA (4/4)*

SRM Institute of Science and Technology   *Chennai, India*
Bachelor of Technology with Specialization in Computer Science   *Jun 2020*

TECHNICAL SKILLSET

Programming Languages: Java, Python, PHP, C++, JavaScript, C, R, Kotlin, Flutter.
Databases: MySQL, OracleSQL, MongoDB
Frameworks: Flask, Keras, TensorFlow, PyTorch, Spring, React.js, Node.js, Materialize, jQuery, WordPress.