RAGHAV KAUL

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EDUCATION

Arizona State University, Tempe, Arizona

Expected May 2021

Master of Science in Computer Science, GPA: 3.57/4

Coursework: Introduction to Artificial Intelligence, Data Mining, Data Processing at Scale, Statistical Machine Learning, Data Visualization, Mobile Computing (ongoing), Human-Computer Interaction (ongoing)

Manipal University Jaipur, Rajasthan, India

August 2015 - May 2019

Bachelor of Technology in Computer Science, GPA: 8.14/10

Coursework: Design and Analysis of Algorithms, Operating Systems, Advanced Computer Networks, Software Engineering, Big Data Analysis, RDBMS, Software Quality and Testing

TECHNICAL SKILLS

Languages: Python, C++, C, JavaScript, HTML, CSS, PostgreSQL, SQL

Tools: Git, GitHub, JIRA, Confluence, Jupyter Notebook, Tableau, Anaconda, LINUX command line, POSTMAN, Local, Blender, WordPress

Certifications: WordPress Theme and Plugin Development (Udemy), Introduction to R (Datacamp), Object-Oriented Programming using C++ (NIIT)

PROFESSIONAL EXPERIENCE

Developer Intern, Aeeiee, Inc, Tempe, Arizona

June – August 2020

- Designed an Augmented Reality museum experience on a WordPress install using Divi and JS.
- Built a custom 3D model viewer for museum objects with included support for .usdz, .obj, and .gltf file formats.
- Assisted in deploying a RESTful interface to implement a Captive Portal for pre-paid user authentication and balance retrieval using VanillaJS.
- Environment and Tools: HTML, CSS, JS, three.js, WordPress, Divi, Sequel Pro, Local, Transmit, Blender, VS Code, XCode

Project Coordinator Assistant, University Technology Office, ASU, Tempe, Arizona

October 2019 – June 2020

- Optimized resource capacity planning and utilization for 60+ members of the Cloud Acceleration teams.
- Monitored and updated teamwork plans within Tempo for each sprint and generated biweekly reports.
- Created schedule plans for project teams and documented action items and major decisions.
- Environment and Tools: JIRA, Confluence, Tempo, Jira Query Language

Product Intern (Computer Vision), Decimal Technologies, Gurugram, India

January – May 2019

- Developed a native OCR document scanner for 4 standard identity documents using novel image processing libraries and techniques.
- Tested functionality by deploying a local API using POSTMAN and stored information as a JSON response.
- Environment and Tools: Python, JSON, Ubuntu, OpenCV, PIL, regex, Tesseract OCR, POSTMAN, PyCharm

Web Development Intern, CBRE, Gurugram, Haryana, India

June – July 2017

- Designed a webpage for ZINNIA MAHIM residential project in Mumbai.
- Created and curated content for 10 CBRE residential projects.
- Environment and Tools: HTML, CSS, PHP, MySQL, Bootstrap, Atom

PROJECT EXPERIENCE

Analysis of Amazon Reviews (Python, NLTK, TextBlob, Tableau, HTML, CSS, JS)

May - June 2020

- Generated a hierarchical dashboard using Tableau for 70,000 Amazon reviews across 7 product categories.
- Performed sentiment analysis using Python to derive product-wise inferences for both consumer and product owners.

Meal Detection using CGM data (Python, NumPy, Pandas, SciPy, pickle, Google Colab, VS Code)

January – May 2020

- Applied supervised learning and clustering techniques on glucose time series data to predict meal intake in type-1 diabetic patients.
- Extracted meaningful temporal and frequency-based features and achieved highest accuracy of 86% using a linear SVC.

Large Scale Geospatial Analysis of NYC Taxi Trips (Scala, Ubuntu, Apache Spark, SparkSQL, sbt)

January – May 2020

- Identified statistically significant clusters for taxi pickups in a Spatio-temporal domain using Apache Spark and Spark SQL.
- Retrieved the 50 most significant hot spot cells using the Getis-Ord (G_i*) statistic.

Compiler Design Projects (C++, Ubuntu, Linux Command Line, Sublime Text)

January - May 2020

- Implemented a compiler from scratch by generating a linked list of instruction nodes for I/O, assignment, and looping statements.
- Constructed a parser for a given input grammar and integrated a type checker enforcing syntactic and semantic rules.
- Calculated useless symbols, first and follow sets and list of terminals and non-terminals for any given context-free grammar.

Prediction of IMDb Movie Ratings (Python, R, NumPy, Pandas, Matplotlib, scikit-learn, Kaggle, Spyder) January – May 2018

- Predicted IMDb ratings of upcoming movies using supervised machine learning algorithms.
- Implemented Naïve Bayes, Decision Trees, SVM, and k-NN for deriving results.
- Compared results between regression and classification models and achieved highest accuracy of 89%.