RAHUL KALAISELVAN

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PROFESSIONAL EXPERIENCE

Software Developer Intern
Porter Lee Corporation

📅 May 2020 – May 2021   📍 Schaumburg, IL

Android Development

- Developed **Android** Mobile Applications, primarily in **Java** for the evidence management system, and LIMS system.
- Documented applications, which includes code, developer's guide, user manual, and test cases.
- Configured build versions, and releases using Gradle.

ASP.NET

- Part of the development team for Porter Lee's laboratory and evidence management system, based on ASP.NET and .NET framework.
- Worked with **C#, JSON, HTML5** and **Javascript**.
- Tested and documented desktop and web applications.

Research Aide
University of New Mexico

📅 Sep -2020 – Nov 2020   📍 Albuquerque, NM

- Assisted ongoing research on the emergence of genetic variation in Single, and Multi loci organisms.
- Simulated generations to inspect genetic changes in multi loci genes with C, and Python.

EDUCATION

Master's in Computer Science
The University of New Mexico, Albuquerque, NM

📅 Expected Graduation: May 2021

Amigo Merit Scholarship recipient (2019 - 2021)

Bachelors in Computer Science and Engineering
SRM Institute of Science and Technology, India

📅 2015 – 2019

CERTIFICATES

- AWS Cloud Techinal Essentials
- Python Data Structures — University of Michigan (Coursera)
- Using Python to access web — University of Michigan
- Introduction to Python — University of Michigan (Coursera)

COURSES

- Algorithms & Data Structures - Machine Learning
- Database Management - Computer Networks
- Artificial Intelligence - Software Foundation
- Software Development Practices - Cyber Security

TECHNICAL SKILLS

- **Programming Languages:** Python, Java, C, C++, JavaScript, Matlab, Haskell, PHP, SQL, CSS, HTML, XML, R and SWI-Prolog.
- **Frameworks & Technologies:** Vue, Node JS, Selenium WebDriver, Angular, React, Scala, Ruby, REST API, Docker, OpenStack, AWS, DJango, Azure, Kafka, SOAP, UML, Jenkins, Git, SVN and Gradle.
- **Libraries:** Pandas, NumPy, SQLite3, Scikit-Learn, MatPlotLib, SciPy, OpenCV, Librosa, TKinter UI.
- **IDEs:** Eclipse, Android Studio, PyCharm, VS Code.
- **Databases:** Oracle 11g, MongoDB, MySQL, PostgreSQL, NoSQL.
- **Operating Systems:** Windows, Linux (Ubuntu, Kali), Mac OS.
- **Methodologies:** Agile scrum, Waterfall model.

ACADEMIC PROJECTS

Decision Tree Classifier - Machine Learning

- Built a decision tree classifier using ID3, CART and CHAID from scratch to classify DNA sequences.
- Tools and Technologies used: Python, Pandas, Seaborn, NumPy - (GitHub link).

Network Simulation in Python

- Implemented Dijkstra, one on one, and broadcast network simulation between multiple systems using Python's socket programming. - (GitHub-link).

Cloud computing

- Deployed Openstack solutions and implemented related functionalities on Nova, Swift, Neutron, Cinder, Keystone and Glance.
- Virtualized Ubuntu server using Docker and deployed MongoDb in Docker containers to replicate master node's database tables on the slaves.

Crime data analysis - Data analysis & ML

- Using urban data of a region, and analysing, plotting patterns. Tools, and Technologies used: Python, SVM, Scikit-learn, Pandas, Seaborn, NumPy, MatPlotLib.

Chat application using Java

- An application to chat between two systems using java socket programming, and Java Swing UI - (Github link).

Document Classification using Naive Bayes

- Classified texts and documents into categories using Naive Bayes, and Logistic Regression Classifier - (GitHub link).