PIYUSH CHOUDHARY

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SUMMARY

Analytical Programmer possesses strong knowledge of Object-Oriented programming. Quickly masters new software packages and hardware technologies. Interest in the field of Data Science and Computer Security. Advocate for pro-privacy issues. Actively seeking internship for summer 2017.

EDUCATION

Master of Science, Computer Science, (August 2016 – Present)
North Carolina State University, Raleigh, USA

- Coursework in *Design & Analysis of Algorithms*, *Advanced Data Structures, Data Guided Business Intelligence, Automated Learning & Data Analysis, Internet Protocols and Computer & Network Security.*

Bachelor of Engineering, Computer Engineering, (August 2012 – May 2016)
University of Mumbai, Mumbai, India

- First Class with Distinction. Member of Society of Automotive Engineers (Aero-design Club), RGIT MUN

SKILLS

- **Data Science:** Hadoop, MapReduce, Machine Learning, Apache Spark, Kafka
- **Programming Languages:** Python, Java, C#, C, R, Node.js
- **Web Technologies:** PHP, HTML, JavaScript, CSS, ASP.net, Apache HTTP Server, WAMP
- **Networking:** Internet Protocols, Socket Programming, Routing Protocols, SDN, Wifi-Security
- **Databases:** Microsoft SQL Server, MySQL, MongoDB, No SQL
- **Other Skills:** Git, AWS, LXML, XML, JSON, Ansible, .NET, Linux

PROJECTS

Machine Learning (Enron Fraud Detection)

- Constructed a machine learning model in python that analyzed data from the email database made available after the Enron trial of 2006. Able to detect people of interest by analyzing financial and text features.

Raspador (Web Crawling and Scraping)

- Ongoing open source project to scrape data (mainly user profiles) across websites and catalogue them. Written in python, alongside the use of distributed computing (parallelism and apache spark).

Big Data and Hadoop (Udacity Forum Analysis)

- Wrote snippets of code in python, to perform activities on the forums of Udacity. Analyzed the forums and deduced useful conclusions from them. The project implemented Hadoop using MapReduce in Python.

Network Security (Establishing a Backdoor on a Remote System)

- Using Raw Sockets, developed a communication interface between 2 systems on the basis of port knocking. Packets at a correct sequence of ports triggered the backdoor on the remote machine giving root access.

Cloud Based Android Application

- Developed an Android application, as a part of Final Year BE project, which continuously gathers various forms of data from mobile phones in terms of locations, images, calls etc. and stores it on a remote server.

PUBLICATIONS

Rogue AP Detection: The Tale of a Datagram and its Algorithms
International Journal of Computer Applications, Volume 127 – No.1, 32-35, ISBN: 973-93-80889-50-5, Research Paper

- The paper presented a new approach to defend against 'Man-in-the-middle' attacks performed by means of a fake Access Point. A robust authorization process was supplemented to the existing WPA2-PSK authentication step which allowed the client to check the identity of the access point during connection.

WORK EXPERIENCE

Software Developer Intern (June 2014 – August 2014)
Reliance Industries Limited

- Worked on developing a portal to provide user administration within an ongoing project. Developed the portal in .NET framework using C# at the front end and SQL Server at the backend.

CERTIFICATIONS

- Hadoop and MapReduce, Udacity, 2015
- Applied Cryptography, Udacity, 2014
- Build a Search Engine, Udacity, 2013
- Data Structures and Algorithms, Indian Institute of Technology, Madras, 2014
- Intro to Statistics, Udacity, 2012