RIDDHI REX ANTONYREX

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EDUCATION

MS IN COMPUTER SCIENCE, Stony Brook University, New York
Expected Grad: Dec 2018 | CGPA: 3.54

POST GRADUATE DIPLOMA IN IT MANAGEMENT, Symbiosis Center for distance learning, India
Grad: May 2016 | Percentage: 81.2%

BACHELOR OF ENGINEERING, COMPUTER SCIENCE, Thiagarajar College of Engineering, India
Grad: May 2014 | Percentage: 90.4%

EXPERIENCE

AKAMAI TECHNOLOGIES, MASSACHUSETTS | SOFTWARE ENGINEERING INTERN (May 2018 –Aug 2018)

- Worked in the DNS Mapping functionality of Akamai.
- Developed a wrapper in Perl for Linux Traffic Control tool. With the wrapper, it is easy to configure networking behavior and mimic the behavior of a WLAN.
- Involved in the generation of Cycle Time Comparison Graphs of the processes in the Testnet and the Production.

ARICENT, CHENNAI, INDIA | SENIOR SOFTWARE ENGINEER (July 2014 – July 2017)

- Worked predominantly in Datacom domain mainly on L2 and L3 protocols in HP Procurve switches in Linux platform.
- Worked extensively with RIP, OSPF, BGP, IPV4, IPV6, VLAN, MAC, VRRP, TCP/IP protocols.
- Designed, developed, tested and delivered CLI and SNMP modules of Routing protocols.
- Worked on multiple Urgent and High priority customer issues and complex internally found defects.

ARICENT, CHENNAI, INDIA | TRAINEE (Dec 2013 – June 2014)

- Automated the testing of Ethernet Linear Protocol Switching protocol over Multi-Protocol Label Switching network with packet capture functionality.

INDIAN INSTITUTE OF TECHNOLOGY, HYDERABAD **|** RESEARCH INTERN (May 2013 –July 2013)

- Proposed an efficient SON based handover decision algorithm for LTE Femtocells for reducing handover delay, signaling cost and packet drop. This approach achieved 31.5% improvement in reducing handover delay compared to the existing HO scheme.

SKILLS

- Programming Languages: C, C++, Python, Perl, Java
- Tools: Ixia Explorer, Ixia Network, Ns3, Multi, Wireshark Packet Capture, Git, Jira, Jenkins, Gerrit, Perforce, Bugzilla, Code Collaborator
- Web Technologies: HTML5, JavaScript, J2EE
- Database: Oracle 9i, Mysql, DB2

COURSEWORK

Analysis of Algorithms, Artificial Intelligence, Data Science Fundamental, Operating Systems, Theory of Database systems, Wireless and Mobile Networks, Data Mining concepts and techniques.

PROJECTS

CREATION OF SECURE GARBAGE FOLDER IN LINUX KERNEL | C (Feb 2018 – Mar 2018)
Created a secure garbage folder in a Stackable filesystem environment. When a file is deleted, it will be moved to a special hidden folder. A provision was added to revert and to list the contents of the folder based on user permission.

IMPLEMENTATION OF PROCESS BASED QUEUES IN LINUX KERNEL | C (Mar 2018 – May 2018)
As an extension of the above project, I developed a kernel-based system to support process-based queues for handling file encryption and compression when moving files to the trashbin asynchronously.

IMPLEMENTATION OF A NEW LINUX SYSTEMCALL | C (Jan 2018 – Feb 2018)
Created a Linux System call to deduplicate the contents of identical files. It takes multiple arguments depending on which identical bytes will be returned or partially matching contents will be written to an output file.

TRACKING OF HUMAN LEG MOTION DURING EXERCISE | PYTHON (Jan 2018 – Present)
Used Machine Learning to track the Leg movement of a person when exercising using a Magnetic strip and Magnetometer and its correctness is verified.

ZILLOW'S HOME VALUE PREDICTION | PYTHON (Sep 2017 – Nov 2017)
Completed s Data Science problem on Kaggle.com where the future sale prices of houses are predicted.

AUTOMATIC BUILDING OF BOOK INDICES | PYTHON (Sep 2017 – Dec 2017)
Built a tool that applies the principles of data science to automatically build back-of-the-book indices by analyzing the user given document. Achieved an accuracy of 85%.

DETECTING THE MUSIC INSTRUMENTS IN A MUSIC PIECE | PYTHON (Sep 2017 – Dec 2017)
Used Machine Learning on an Acoustic Sensing project to detect what instrument is played in a music piece. 13 different instruments including Human voice were accurately predicted with an accuracy of 71%.

IMPROVING QOS IN MIPV6 NETWORK | OMNET++ (July 2012 – November 2012)
To improve the QoS in MIPv6 network, I studied the behavior of binding cache of nodes and its effects on QoS and proposed a method for reducing the packet loss by efficient load balancing among the nodes.

TOPIC MODELLING | JAVA (Jan 2011 – May 2011)
Developed a Content-based search mechanism to find the topic of the document. This project was sponsored by Honeywell Technology Solutions under HTS University Relations Program.

ACHIEVEMENTS

- Awarded Extraordinary Performer and Excellent Performer during two consecutive years at Aricent for consistently achieving the goal and for delivering quality code in a timely manner.
- Recipient of IASc-INSA-NASI Summer Research Fellowship (2013). Worked as Research Intern with Dr.Bheemarjuna Tamma, Head of the Department, Computer Science, IIT, Hyderabad, India.
- A Competent Table Tennis player. Won First runner-up in State Championship tournament 2010. Captain of women's Table Tennis team for 3 years (2012- 2014). Trained and managed a group of 16 students.

PUBLICATIONS

- Won Best Paper Award for presenting a paper on Intelligent Transportation System using Mobile Wireless Sensor Networks in Kurushektra 13', a National level symposium conducted by Anna University.
- Efficient SON Handover Scheme for Enterprise Femtocell Networks, IEEE International Conference on Advanced Networking and Telecommunication Systems (ANTS) 2013.
- Home Agent load balancing in MIPv6 networks, National Conference on Communication and Engineering (NICE 12).