RIDDHI REX ANTONYREX

riddhirex.antonyrex@stonybrook.edu | +1 (346) 763-0976
linkedin.com/in/riddhirex/ | riddhirex.github.io/

EDUCATION

STONY BROOK UNIVERSITY
MS IN COMPUTER SCIENCE
Expected Grad: Dec 2018 | CGPA: 3.54

SYMBIOSIS CENTER FOR DISTANCEC LEARNING
POST GRADUATE DIPLOMA IN IT MANAGEMENT
Grad: May 2016 | Percentage: 81.2%

THIAGARAJAR COLLEGE OF ENGINEERING
BACHELOR OF ENGINEERING, Computer Science and Engineering
Grad: May 2014 | Percentage: 90.4%

COURSEWORK

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

EXPERIENCE

AKAMAI TECHNOLOGIES, MASSACHUSETTS | INTERN (May 2018 – Present)
Worked in the Mapping functionality of Akamai. Involved in comparing the Cycle time of the processes among the components in the IMCR Testnet and the Production and Cycle Time Comparison Graphs were generated.

ARICENT, CHENNAI, INDIA | SENIOR SOFTWARE ENGINEER (July 2014 – July 2017)
Worked predominantly in Datacom domain. Involved in the development of feature enhancements and new functionality of Layer2 and Layer3 protocol in HP Procurve switches in Linux platform. Efficient with RIP, OSPF, BGP, IPV4, IPV6, VRRP, TCP/IP protocols.

ARICENT, CHENNAI, INDIA | TRAINEE (Dec 2013 – June 2014)
Automated the testing of ELPS protocol over MPLS network with packet capture functionality.

INDIAN INSTITUTE OF TECHNOLOGY, HYDERABAD, INDIA | RESEARCH INTERN (May 2013 – July 2013)
Proposed an efficient SON based handover decision algorithm for reducing handover delay, signaling cost and packet drop.

SKILLS

- Programming Languages: C, C++, Python, Java
- Tools: Ixia, Ns3, tc(Traffic control), Multi, Wireshark Packet Capture, Git, JiRA, Jenkins, Gerrit, Bugzilla, Code Collaborator
- Web Technologies: HTML5, JavaScript, J2EE.
- Database: Oracle 9i, Mysql, DB2

PROJECTS

CREATION OF SECURE GARBAGE FOLDER IN LINUX KERNEL | C (Feb 2017 – Mar 2017)
A secure garbage folder was created in a Stackable filesystem environment. When a user deletes a file, it will be moved to a special hidden folder. Because there is only one garbage folder for all users, the files are encrypted. Provision was added to revert the file using ioctl(2) and to loop up or list the contents of the garbage 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, a kernel-based system was developed to support process-based queues for handling file encryption and compression when moving files to the trashbin. They were done asynchronously using kernel queues and kthreads. Older files in the trashbin folder will be periodically deleted.

IMPLEMENTATION OF A NEW LINUX SYSTEMCALL | C (Jan 2018 – Feb 2018)
A System call was written to deduplicate the contents of the identical files. If the syscall is issued with option n, identical bytes are returned. With option p, partially matching contents are written to an output file. With option d, relevant debugging messages are logged.

ZILLOW'S HOME VALUE PREDICTION | PYTHON (Sep 2017 – Nov 2017)
This is a competition on Kaggle.com. This is a Data Science problem where the sale price of the houses must be predicted before its sales. It uses Random Forest regression model to predict the final sale price of the houses.

AUTOMATIC BUILDING OF BOOK INDICES | PYTHON (Sep 2017 – Dec 2017)
The purpose of the project is to build a tool that applies the principles of data science to automatically build back-of-the-book indices by analyzing the user given document.

DETECTING THE MUSIC INSTRUMENTS IN A MUSIC PIECE | PYTHON (Sep 2017 – Dec 2017)
The project is based on Acoustic Sensing and learning to detect what kind of instrument is used in a music piece using Machine learning. It can classify nearly 40 instruments including human voice.

AUTOMATION OF TESTING OF ELPS PROTOCOL OVER MPLS NETWORK (Dec 2013 – July 2013)
Automated the process of verifying the working of ELPS protocol over MPLS network. It evaluates the path taken by the packet, the ports through which it passes to reach the destination and its contents.

ENERGY EFFICIENT INTER-FEMTOCELL HANDOVER IN LTE | NS3 (May 2013 – July 2013)
In this project, an efficient SON handover scheme was proposed to mitigate the unnecessary handovers. The proposed approach uses building information and estimated UE position for making handover decision. Proposed approach achieves 31.5% improvement in reducing handover delay compared to existing HO scheme.

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

TOPIC MODELLING | JAVA (Jan 2011 – May 2011)
This Text Analytics project evaluates the article to find the topic of the document. Instead of topic-based search, content-based search mechanism was adopted. It aims at improving the search engine efficiency. This project was sponsored by Honeywell Technology Solutions under HTS University Relations Program.

ACHEIEVEMENTS

- Published a paper on Efficient SON Handover Scheme for Enterprise Femtocell Networks at IEEE International Conference on Advanced Networking and Telecommunication Systems (ANTS) 2013.
- Received the 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.
- Presented a paper on Home Agent load balancing in MIPv6 networks in National Conference on Communication and Engineering (NICE 12).
- 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 on LTE Femtocells.
- Completed Oracle certified course on Core Java Programming language using Java SE6 and Cisco Certified Network Associate course.
- 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).