Rima Rana

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EDUCATION

The University of Texas at Austin   Austin, TX
Master of Science in Software Engineering; GPA: (3.89/4.000)   *Aug. 2017 – May. 2019*
Birla Institute of Technology and Sciences Pilani   Pilani, India
B.E.(Hons) in Electrical and Electronics Engineering; GPA: 9.36/10.0   *Aug. 2010 – June. 2014*

SKILLS

Languages/Architectures – Java, C, C++, Python, Go, SQL, Kubernetes, REST, JavaScript, HTML/CSS, Perl, JQuery
Courses – Data Mining, Algorithms, Software Architecture, Multicore Systems, Blockchain, Requirements Engineering, Advanced Programming Tools, Automated Software Design

EXPERIENCE

Microsoft   Redmond, USA
Software Engineer II   *1 year & 6 months*, *July 2019 - Present*
SQL Server Big Data Cluster
· Implemented and designed the configuration framework for post deployment changes on the SQL Server Big Data Clusters (on-prem SQL solution with kubernetes).
· Managed a workgroup of 3 engineers and led the efforts to design, implement and test the feature.
· Onboarding the complex on-premises solution of Big data clusters to Azure using Kubernetes native programming.

Microsoft   Redmond, USA
Software Engineer Intern   *3 months*, *May 2018 - Aug 2018*
SQL Server Proxy for Big Data Clusters *May. 2018*
· Designed and implemented SQL Server proxy using Golang working on Tabular Datastream protocol securely and efficiently
· Integrated proxy for SQL Server on Kubernetes cluster as separate service for reliability and scalablity.

The University of Austin   Austin, TX
Research Assistant   *1 year & 5 months*, *Jan. 2018 to May 2019*
· Worked with the UT Center for Identity Research Group for project on International Identity Protection with Identity Ecosystem.

Oracle   Bangalore, India
Senior Software Engineer   *3 years*, *Jul. 2014 – Jul. 2017*
Key Management Service (KMS) *Jun. 2016*
· Implemented encryption service offered for creation and control keys to encrypt data for applications.
· Developed the UI console using Oracle JET to provide a centralized control to create, import and rotate keys.
Identity Cloud Service(IDCS) *Jun. 2015*
· Spearheaded development of REST APIs for authorization and uptake of single sign-on for cloud.
· Improved security by enabling OTP & Notification based multi factor authentication on mobile OS devices.
Oracle Mobile Security Suite (OMSS) *Jul. 2014*
· Developed an automated installation for mobile security suite and integration with other identity products.
· Ideated & implemented an auditing framework for admin to debug logs; Improved bug identification by 50%.

Texas Instruments   Bangalore, India
Intern   *6 months*, *Jan. 2014 to June 2014*
· Developed a tool to unify the report generation across products; Implemented the complete tool in SQL & Perl, Identified developer issue of managing data from multiple vendor products in IC design process

PROJECTS

- **Internationalization of UT CID Ecosystem,** *Jan. 2018* Java: Extracted dataset for international identity theft stories and analyzed for International PII using the UT CID Identity Ecosystem. Enhanced the bayesian network code for 2x nodes and edges for the Ecosystem graph.
- **Google Landmark Recognition Challenge,** *Apr. 2018* Python: Implemented CNN, FastXML and PDSparse based Extreme Classification model with accuracy of 70 % for a million images belonging to 15000 classes.
- **Portals using Google Cloud Platform,** *Oct. 2017* Python: Designed and implemented a personalized travel monitor to plan daily commute via public transport with live notifications about traffic and service disruptions; Developed website and android app to add, search, store and geo view images using Jinja.

PUBLICATION

- **International identity protection**: Masters Thesis on identity protecton of identity using blockchain and analysis of international PII.
- **An Assessment of Blockchain Identity Solutions: Minimizing Risk and Liability of Authentication**: Published in 2019 IEEE/WIC/ACM International Conference on Web Intelligence (WI), 26-33
- **US-Centric vs. International Personally Identifiable Information: A Comparison Using the UT CID Identity Ecosystem**: Published in 2018 International Carnahan Conference on Security Technology (ICCST)
- **Integrated Multifactor & Image Based Security Question Authentication**: Patented in 2018, Techniques for access management based on multi-factor authentication including knowledge-based authentication. (US Patent App. 10/157,275).