MOHAMMED M RANGWALA

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EDUCATION

Master of Science in Computer Science — Graduation: May 2014
Purdue University, Indianapolis (IUPUI) — GPA: 4.0/4.0

Bachelor of Engineering (B.E.) in Computer Engineering — Graduation: June 2012
Thadomal Shahani Engineering College (TSEC), University of Mumbai, India — Percentage: 74.26%

COMPUTER PROFICIENCY

- **Programming Languages:** Java, C#, Swift, Objective-C, Caché ObjectScript, ASP.NET, Android SDK, C++, C, Python
- **Web Technologies:** HTML, XML, CSS, JavaScript, JQuery, .NET MVC
- **IDE:** NetBeans, Visual Studio, XCode, Eclipse, Android Studio
- **Database Technologies:** MS Access, MS SQL Server 2014, Oracle 9i
- **Operating Systems:** Microsoft Windows XP/Vista/7/8/10, Mac OS X, Arch Linux
- **Other skills:** Scrum, LaTeX, AutoCAD, Adobe Photoshop, CorelDRAW

WORK EXPERIENCE

- **Epic Systems Corp.**
  - **Software Developer, MyChart (Epic's Patient Portal) Mobile Team** — **May 2016-present**
    - Area expert of the Track My Health module of the MyChart iOS application involving Apple HealthKit integration
    - Currently designing the migration of the MyChart Apple watch application to WatchOS 2.2
  - **Team Leader, Internal Projects Team** — **May 2015-May 2016**
    - Product expert of the Electronic Travel Requests, Purchase Requests and Time Logging internal applications
    - Lead the migration of the Travel Request system to a new 2.0 framework that uses .NET MVC and Javascript which improves user workflows and significantly reduces time spent on maintaining legacy applications
  - **Software Developer, Internal Projects Team** — **June 2014-May 2016**
    - Developed Time Turner, an iOS 8+ application for internal mobile time logging used by 8000 employees
    - Improved time logging compliance across the Implementation staff to 99.8% within 2 months of releasing the application
    - Reduced the 6 month rolling average by 70% in Sept 2015 for number of employees logging time late as compared to Jan 2015
    - Developed a digital scrum task board for easily tracking and assigning project tasks within Internal Projects team members

PUBLICATIONS

- M. Rangwala, P. Zhang, X. Zou and F. Li, **"A Taxonomy of Privilege Escalation Attacks in Android Applications"**, International Journal of Security and Networks, Vol. 9, No. 1, pp.40–55, 2014.
- M. Rangwala, Z. Liang, W. Peng , X. Zou and F. Li , "**A Mutual Agreement Signature Scheme for Secure Data Provenance**", Computer Communications and Networks (ICCCN), 2014 23rd International Conference on,), pp. 726-733, Shanghai, China, Aug 2014.

ACADEMIC EXPERIENCE

- **Graduate Teaching Assistant** for CSCI 55500 Cryptography under Dr. Xukai Zou — **Aug-Dec 2013**
  - Developed GUI programs using Java Swing and NetBeans to facilitate easy assignment creation
  - Instructed a class of 36 students on 'Weighted Secret Sharing Schemes'
  - Graded assignments and exams and conducted independent and group tutoring sessions for students

ACADEMIC PROJECTS

- **M.S. Research Thesis - Secure Digital Provenance: Challenges and a New Design:** — **2013-2014**
  Proposed a new scheme defining the structure of provenance meta-data, for securing provenance chains and graph structures, which uses signature fields to establish mutual agreements between users
- **Detection of overlapping rectangles using Interval trees in O(nlgn):** — **Mar 2014**
  Developed a program for an O(nlgn) algorithm with Interval trees (augmented Red-Black trees) to determine overlaps in rectangles of a VLSI database using Java
- **Implementation of Selective Repeat Protocol:** — **Aug-Dec 2013**
  Implemented the Selective Repeat reliable transport layer protocol for transferring files between remote/local client and server using Java Swing and multithreaded Socket programming
- **IUPUIMapped:** — **Mar-May 2013**
  Developed an Android application of an interactive map of the IUPUI campus integrated with the IUPUI Twitter stream that eased the locating of places, buildings, events on campus with GPS navigation
- **Mobile Remote - Touchscreen Phone as a Virtual Keyboard and Trackpad:** — **Aug 2011-Apr 2012**
  Developed an Android 2.3 Gingerbread application that allowed a touchscreen phone to perform cursor positioning, object selection and text-input on a PC through Wi-Fi, and recognised multi-touch gestures and accelerometer motion

HONORS AND ACHIEVEMENTS

- Awarded the **Gersting Award** for an Outstanding Graduating student by the Purdue School of Science — **Apr 2014**
- Awarded the **University Fellowship** at IUPUI for the academic year 2012-2013