

PRAKHAR PANWARIA

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EDUCATION

- 2012 - 2014** **University of Wisconsin-Madison** Madison, WI
Currently pursuing M.S. in Computer and Information Sciences (expected May, 2014), GPA: 4.0/4.0
Courses (Fall'13): Distributed Systems, Machine Learning
Previous Courses: Advanced Operating Systems, Database Management Systems, Artificial Intelligence, Data Models and Languages, Scripting with Python
- 2005 - 2009** **Motilal Nehru National Institute of Technology** Allahabad, India
Bachelor of Technology in Computer Science and Engineering, GPA: 9.91/10.0 (Position: 3rd/110).

TECHNICAL SKILLS

Mobile Platforms	Android 2.0+, iOS 4.0+
Programming Languages	C++, Java, C, Visual C#, Python, Objective-C
Big Data Technologies	Apache Hadoop, Apache Hive
Web Technologies	HTML, XML, JSON, JSOUP, ASP.NET
Database Technologies	MySQL, SQLite
IDEs worked on	Eclipse 3.x, XCode, MS Visual Studio, Dreamweaver, Flex Builder
Operating Systems	Win (2000/XP/Vista/7), Mac OS X (10.5+), Linux (FC6, Ubuntu 10.0+)

TRAININGS / CERTIFICATIONS

- 'Secure Software Engineering - White Belt Training', conducted by ASSET Team, Adobe Systems.
- 'Secure Software Engineering - Green Belt Training', conducted by ASSET Team, Adobe Systems.
- 'Adobe Certified Expert' in Adobe Acrobat 9.0 application.
- 'Certified ScrumMaster (CSM)', by ScrumAlliance.

WORK EXPERIENCE

- Jan13 - Present** **Graduate Research Assistant, UW-Madison (WiNGS Lab)** Madison, WI
Jan13 – Present **WiSense: Android application to detect non-WiFi interferers using commodity WiFi cards**
- Designed and built the product from scratch. Leading effort, and developing more application features.
- Technologies: Android, Java, MongoDB, PHP, JSON, Eclipse
- Feb13 – Present **DriveSense: Android application to sense how a driver is driving his vehicle**
- Mentoring undergrads involved in the project, helping them with application design and bug fixing.
- Technologies: Android, Java, XML, JSON, Eclipse
- Jun13 - Aug13** **Intern, @WalmartLabs (Team: SmartStore)** San Bruno, CA
Jun13 - Aug13 **Evaluating online influence of Store Detail Pages on offline Store Sales**
- Developed data models and built a system to analyse if users, who are viewing Store Detail Pages, are actually going to Stores and making purchase. Also, did analysis of Store Sales driven by these pages.
- The system helps in making decisions on what information to provide on Store Detail Pages.
- Technologies: Apache Hadoop, Apache Hive, Unix Shell Scripting, XML
- May09 - Jul12** **Senior Member of Technical Staff, Adobe Systems (Team: Adobe Reader Mobile)** Noida, India
Nov10 - Jul12 **Development of Adobe Reader application for Android and iOS Platform**
- Planned, designed and worked on product features, such as PDF Annotations Support (Highlight, Add Text, Sticky Notes), PDF Rendering Module, Activity Life Cycle, File Manager/Browser, General UI.
- Technologies: Android, iOS, C++, Java, Objective-C, Eclipse, XCode, RMSDK, Tetrophilia3
- Products Affected: Adobe Reader 10.1+ for Android and iOS

- Nov10 - Feb11 **Delivery of Image Content in Messages through In-Product Messaging (IPM) Framework**
- Technologies: C++, MS Visual Studio 08, XCode 3.2
 - Products Affected: Adobe Reader and Adobe Acrobat 10.1 on Windows and Mac OS X
- Sep09 - Oct10 **Development of IPM for creating, targeting and delivering messages to the client application**
- Technologies: C++, MS Visual Studio 08, XCode 3.2
 - Products Affected: Adobe Reader and Adobe Acrobat 10.0 on Windows and Mac OS X
- May09 - Aug09 **Development of a plugin to create a PDF with selective content from another PDF document**
- Technologies: C++, MS Visual Studio 05, Acrobat SDK 9.0
 - Products Affected: Adobe Acrobat 9.0 on Windows and Mac OS X

ACADEMIC PROJECTS

- Mar13 – May13 **TweetBuzz: Information Extraction application to identify buzzwords in a specific domain**
- Used Twitter as a data resource and specific knowledge of a domain to analyse its current buzzwords.
 - Considering 'Hollywood Movies' as our domain, developed a system which creates a huge taxonomy of movies and generates a tag-cloud to compare how highly different movies are discussed via tweets.
 - Technologies: Java, Twitter API, XML, JSOUP, TMDB, Twitter4J, Eclipse
- Sep12 – Dec12 **Implementation of Persistent File Cache on Android Operating System**
- Developed a model which modifies the file cache to behave as persistent storage, thereby increasing system performance and power efficiency. In order to ensure protection of data in memory, we studied and proposed two mechanisms which are- write protecting pages and using transcendent memory.
- Aug08 – Apr09 **Design, Implementation and Analysis of Retroactive Data Structures**
- Designed algorithms and data structures for Fully Retroactive BST, Hash and Union-Sameset.
 - Studied existing retroactive data structures for Queue, Deque, Priority Queue and Union-find.

SIDE PROJECTS

- Sep13 – Sep13 **Guido: Prototyped Android application for Indoor Navigation using a Robotic Ball as a guide**
- Event: PennApps Fall 2013 Hackathon, UPenn (Won 'Best use of Speech Technologies' Award)
 - Technologies: Android, Sphero Android SDK, Nuance Android SDK, Java, Eclipse
- Jun13 – Jun13 **StyleMe: Prototyped iOS application to connect with Professional Stylists in real time**
- Event: Angel Hack Silicon Valley 2013 Hackathon, PayPal HQ, San Jose (Won '2nd' Place and 'Best use of PayPal APIs' Award)
 - Technologies: iOS, PayPal iOS SDK, Firebase iOS SDK, Objective C, XCode
- Nov12 – Mar13 **Android application to recommend Bank giving the best forex rate for USD to INR transaction**
- Technologies: Android, Java, JSOUP, SQLite, HTML, Eclipse
- Sep12 – Sep12 **Android application to Capture (Facebook) Events on Google Maps for a given location and time**
- Event: Facebook 2012 Hackathon, University of Wisconsin-Madison
 - Technologies: Android, Java, Eclipse, Facebook Graph APIs, JSON, Google Maps Android API
- Jan09 – Apr09 **Web application for Management of Earned Leaves of the Institute Faculty**
- Technologies: Visual C#, ASP.NET, Visual Studio 05

PUBLICATION

- **Implementation, Analysis and Application of Retroactive Data Structures**
International Journal of Computer Science and its Applications, 2, 1, 88-92, 2012
Co-authored with Dr. (Mrs.) Suneeta Agarwal, Professor, MNNIT, Allahabad, India

ACHIEVEMENTS

- 'Certificate of Academic Excellence'. Secured highest GPA in B.Tech. 1st year examination in 2006.
- Received Merit Scholarship throughout four years (2005-09) of my undergraduate studies.
- Among top 0.24% students nationwide (All India Rank -939), who qualified AIEEE in 2005 to get admission in prestigious engineering schools of the country.
- My paper 'Using RAID & Retroactive Data Structures for reliable storage' won Consolation Prize in TeXhibit'09, National Level Online Paper Presentation Contest conducted by Amazon.com, Inc.
- Won Third Prize in 'Robotics' event in Avishkar'05, a National Level Technical Symposium organized by MNNIT, Allahabad.