

Pradeep Kiran Chakkirala

Education

- 2014.8–present **Master of Science, Computer Science**, *University at Buffalo, SUNY*, Amherst, NY, GPA:3.38.
Courses: Operating Systems, Distributed Systems, Design and Analysis of Algorithms, Applied Cryptography, Information Retrieval, Wireless Network Security, Software Engineering, Machine Learning
- 2010.7–2014.5 **Bachelor of Technology, Computer Science and Engg.**, *GITAM University*, India.
First Class with Distinction

Technical Skills

- Languages C, C++, Java, Python, SQL
Web PHP, JavaScript, HTML, CSS
Platforms Android, .NET
Tools Git, Vim, Gdb, \LaTeX

Experience

- 2013.5–2013.6 **Software Developer Intern**, *Dept. of IT, Visakhapatnam Steel Plant*, India.
Real-time implementation experience in the migration of the DNW Department's manual entry process to a computerized system in .NET framework using C# .NET and SQL Server 08.

Projects

- ANDROID **Amazon Dynamo**: Designed and implemented a replicated key-value storage system on lines of Amazon Dynamo on the Android platform. Supports partitioning, replication and failure handling. Data is stored across multiple android app instances in local SQLite databases.
- Rooted? | Android App on Google Play**: Developed and published an application, 'Rooted?' which verifies root access and busybox installation and also provides root information. The app has over 25k downloads and has garnered many positive reviews.
- Guard | Enhancing current security practices using wearable devices**: An analysis of using smart wearable devices for gesture recognition and 2FA to enhance currently available security mechanisms. Implemented on Android Wear.
- C **Synchronization Primitives and System Calls for OS161**: Implemented locks, reader-writer locks, condition variables for synchronization among multiple threads. Designed and Implemented File system calls (open, close, read, write, lseek, dup2) and Process Support (fork, execv, getpid, waitpid) on OS161, an instructional operating system.
- C++ **Remote File Sharing System**: Created a hybrid network application based on client-server and p2p communication for file sharing among multiple systems connected in a network using socket programming.
- Java **News Indexer**: Developed an application that can parse, tokenize and index a news corpus of 10,000 news articles. The index is used to retrieve results using Apache Solr.
- Web **XMLWeb – A Database and Web Application**: Coded a Java application that processes XML files and produces a HTML file that displays data input form which also performs validation, an MySQL script file to create relational tables for the data, and PHP files for processing the data submitted by the user.