Praveen Kumar Pendyala

Android developer | Linux enthusiast | Web hobbyist

Info

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Skills

Programming

Java, PHP, Kernel C, Python, JavaScript, Octave, Verilog

Web

AngularJS, HTML5, REST APIs, Bootstrap, MVCs, Bower

Android

Retrofit, Volley, Picasso, Material Design, Play Services

Tools

Git, SVN, MySQL, Asterisk, Xilinx ISE, Jekyll, LATEX, Moodle

Platforms

Linux, Windows, Mac OSX, Beaglebone, Google App Engine

Note

Only included the most recent or major accomplishments in each section. For complete list, please refer to the web links in info section.

Education

since 2014 Masters, Distributed Software Systems

Technische Universität Darmstadt

Research Assistant

2010–2014 Bachelors, Electrical Engineering

Indian Institute of Technology Bombay

Experience

since 2014 **Center for Advanced Security Research Darmstadt**

Working in Cloud, Android and Mobile security.

05-08 2014 Google Summer of Code Developer

Developed kernel display driver for remote access to Linux from Android.

05-07 2013 Rice Univeristy Research Internship

Implemented a dual-core Physically Unclonable Function.

Publications

2017 **Phonion: Practical Protection of Metadata in Telephony Networks** Pro-

ceedings on Privacy Enhancing Technologies (PoPETs) 2017

2016 DroidAuditor: Forensic Analysis of Application-Layer Privilege Escala-

> tion Attacks on Android Financial Cryptography and Data Security Conference 2016

Achievements

- Winners of MAPPING Competition and €20,000 prize money, CeBIT 2016, Hannover
- A. Richard Newton Young Student Fellow Award, DAC 2014, San Francisco
- Recipient of Indian Association for Research in Computing Science grant, 2013

Projects

2015-2016 Omnishare

Android, Cryptography, Dropbox Core APIs

Developed an Android application for client side encryption of data before uploading to cloud services like Dropbox. The system also supports simultaneous multiple device installation and secure file sharing.

Phonion 2014-2016

Python, Java, Twilio, Asterisk, Google Voice, Selenium, Tor

Phonion is a Tor like anonymization network for Telephony or VoIP communications. Designed and implemented the Phonion architecture which offers better call quality than VoIP over Tor and supports offline calling.

2014 **Android accessory driver** Linux Kernel, Android accessory

Developed a Kernel driver to setup any Android device into Accessory (ADK) mode. Also reused this as an independent module in developing a display driver for Linux on Android as part of Google Summer of Code.

MDroid - Moodle for Android 2012-2016

Android, Githooks, REST, Markdown

Created a native open sourced Moodle application for Android. The app received over 75,000 downloads on Play Store and translated into 3 different languages by contributors.