Shikher Verma

Phone : (+91) 9455555002
Github id: ShikherVerma

Email: root@shikherverma.com
Website: shikherverma.com

Education

Indian Institute of Technology Kanpur *2014-2018 (Expected)*
Bachelor of Science, Major in Physics

Work Experience

- **Research Intern, Secure Systems Lab NYU** *under Prof. Justin Cappos, May-July 2017*
  - Proposed an extention of git push certificates to make git servers trustless and resilient to hacks.
  - Developed patches for git to extend git push certificates and sent them to git mailing list for review.
  - Contributed to in-toto, a framework to secure the integrity of software supply chains.
  - Worked on integrating in-toto in OpenSUSE linux to increase security of packages.
  - Contributed new features, bug fixes and tests to the in-toto framework.

Open Source Projects

- **Autonomous Underwater Vehicle, robotics project** *under Prof. K.S. Venkatesh, 2014-2017*
  - **Software Team Head**, lead a team of 5 students since August 2015.
  - Achieved **2nd place** at national level competition NIOT-SAVe in our debut attempt. (December 2016)
  - Robot capable of navigating and performing various tasks independently under water.
  - Using OpenCV for Vision and Gazebo for simulator tests. Built using Robot Operating System.
  - Set up Travis CI for automating building and deploying Doxygen docs to github gh-pages.

- **Keyboard Ninja, Rails game** *October 2016*
  - Online multiplayer typing game. The game is live at keyboardninja.herokuapp.com
  - Developed RESTful APIs for creating, joining games and getting result.
  - Built using Rails, Coffeescript, Postgres and deployed on Heroku.

- **Antaragni Android App** *May-October 2015*
  - Built the Android application for the golden jubilee of Antaragni, cultural festival of IIT Kanpur.
  - Users can view schedule, event details, venue map and contact details of event organizer.
  - Notifications, result declaration, reminders are provided through FCM.

- **Android C IDE** *under Prof. Amey Karkare, January-April 2015*
  - Users could write and run interactive C language programs, include standard library.
  - Cross compiled tiny c compiler and libraries for different android architectures.

- **Other Notable Open Source Contributions**
  - html-textview, added support for external image downloading libraries.
  - Materialistic Hacker News, added option to reload saved page if offline data is cleared.

Technical Skills

Languages	Kotlin, Java, Python, Ruby, C/C++, TypeScript, JavaScript, Bash, HTML5, CSS
Frameworks/Tools	Android SDK, AngularJS, Rails, ROS, OpenCV, Bootstrap, Jekyll, Jenkins, Docker

Positions of Responsibility

- **Google Developer Group** Lead Coordinator *2015-2016*
  - Taught more than 15 sessions on Android, including tutorials for Software Architecture (CS654).
  - Guided about 80 people through Google Study Jam and CS for Android online courses.

- **Student Guide** *2015-2016*
  - Helped 7 new students while they familiarize with the rigours of college life.

- **Mentoring Projects**
  - Facilitated 3 students in various robotics club projects and 6 students in programming club project.
  - Member of Navya, FLOSS group. Mentored 5 students in contributing to open source.

Extracurricular activities

- Secured 1st place in intra-college tournament Josh Chess 2015. Part of college chess team 2014.
- All India Rating Chess Tournament 2012, secured 56th place amongst 200 participants.
- Secured 2nd position in Basketball in Freshers Inferno in 2014, intra-college sports event.
- Secured 2nd position in Lucknow Zonal BasketBall Championship 2013.