AANJHAN RANGANATHAN

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Education

- **École Polytechnique Fédérale de Lausanne, Switzerland**—School of Electronics
  Masters in Electronics and Microelectronics

  – CGPA : 5.62/6, graduated in February 2010

- **Anna University**—SSN College of Engineering, Chennai, India
  Bachelors in Electronics and Communication

  – Percentage : 82% (Overall), graduated in April 2005

Experience

- **Doctoral Assistant - PhD candidate, System Security Group, ETH Zurich**—
  September 2010–present

  – The goal of the research thesis is to investigate techniques for the secure location determination of a wireless device.

- **Research Assistant - Processor Architecture Laboratory, EPFL**—
  March 2010–July 2010

  – Worked on an extension to the Master thesis on Snoop Filters for Multiprocessor based Embedded Systems. Also assisted in developing a cryptographic hardware platform based on Arduino for performing Differential Power Analysis attacks.

- **Contract Employee, Google Inc. (GSoC)**—
  May 2009–August 2009

  – Worked for RTEMS project on Memory Management Unit support. Details can be found in http://www.rtems.org and http://code.google.com/p/rtems-mmu-support/wiki/GSoCFinalReport

- **Robert Bosch India Ltd. (Car Multimedia Group)**—Bangalore, India
  Senior Engineer:June 2005–June 2008

  – Worked for Volkswagen and Audi OE Projects in the Premium Telephone team of three members, responsible for interfacing the car multimedia system with bluetooth enabled handsets. Responsible for requirements Analysis, design, implementation, testing and release. Gained experience in end customer interaction.

- **Teaching Assistant - Microsystems Laboratory (LSM), EPFL**—Switzerland
  October 2009–November 2009
  - Worked as a teaching assistant at the Microsystems laboratory under Prof. Alain Vachoux for Hardware System Modeling and EDA based VLSI design (Semi-Custom part) courses

- **Free Software**
  - Developer and maintainer of GNUSim8085, a 8085 simulator. [http://gnusim8085.sourceforge.net]
  - Active member/co-admin of Ubuntu India Community. [https://launchpad.net/people/aanjhan]
  - RTEMS Contributor http://www.rtems.com

Research Papers/Publications/Projects

- **Enabling Trusted Scheduling in Embedded Systems**, Ramya Jayaram Masti, Claudio Marforio, Aanjhan Ranganathan, Aurélien Francillon and Srdjan Capkun in *Proceedings of 28th Annual Computer Security Applications Conference (ACSAC), 2012 (to appear)*

- **Design and Implementation of a Terrorist-Fraud Resilient Distance Bounding System**, Aanjhan Ranganathan, Nils Ole Tippenhauer, Boris Skoric, Dave Singelee and Srdjan Capkun in *17th European Symposium on Research in Computer Security (ESORICS), 2012*

- **Counting Stream Registers: An Efficient and Effective Snoop Filter Architecture**, Aanjhan Ranganathan, Ali Bayrak, Theo Kluter, Philip Brisk, Edoardo Charbon and Paolo Ienne in *Proceedings of International Conference on Embedded Systems: Architectures, Modeling and Simulation (SAMOS XII), 2012*

- **Physical-Layer Attacks on Chirp-based Ranging Systems**, Aanjhan Ranganathan, Boris Danev, Aurélien Francillon, Srdjan Capkun in *Proceedings of the ACM Conference on Security and Privacy in Wireless and Mobile Networks (WiSec), 2012*

- **Experimental Analysis of Snoop Filters for MPSoC based Embedded Systems**, *Master Thesis* at Processor Architecture Laboratory, EPFL, Switzerland

- **Mounting of Version Control Repositories–RepoFS** at *International IEEE High Performance Computing Conference 2006, Bangalore, INDIA* http://www.hipc.org/hipc2006/posters/repofs.pdf

- **Linux and *BSD feasibility study for Automotive Embedded Software** at *SIAT 2007 International Conference at Pune, INDIA (SAE Paper No. 2007-26-057)*

- **Hybrid Electric vehicle with Intelligent Drive Switching**, presented at IIT Bombay, SAE Student Conference at PSG Tech Coimbatore

- **Virtual Vision–Module for the Blind**, presented at IIT Bombay [Techfest 2005]

Awards

- 'Young Scientist Award 2004' by the INDIAN SCIENCE MONITOR
- 'Distinguished Alumni' award from SSN Institutions, Chennai, India

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