Kunal Baweja

Phone: +1-914-689-5240

Email: kunal.baweja@columbia.edu

May 2014 - July 2014

## Education

 Columbia University in the City of New York, USA Sept 2016 - Dec 2017 MS in Computer Science • Birla Institute of Technology & Science, Pilani K.K. Birla Goa Campus, India Aug 2011 - May 2015 B.E.(Hons.) in Computer Science, GPA: 7.49/10

## **Employment**

• Digital Centers Teaching Internship, Columbia University Sept 2016 - May 2017 - Open for all labs and workshops on Python programming language. Research Internship at TSUNAMi Center, National University of Singapore Jun 2015 - May 2016 - Web and systems security, applied cryptography and distributed systems. • Summer Internship at Bentley Systems Inc., India May 2014 - July 2014 Prototype and REST API development for Bentley Connect Interoperability Services • Summer Internship at Bharat Heavy Electricals Limited, India May 2013 - July 2013 - Software Development for BHEL Online Meeting Management System

## Publication & Projects

1. A Secure Sharding Protocol for Open Blockchains [Accepted: CCS-2016] Oct 2016 - ACM Conference on Computer and Communications Security, 2016 - Authors: Loi Luu, Viswesh Narayanan, Chaodong Zheng, Kunal Baweja, Seth Gilbert, Prateek Saxena 2. Web Application Vulnerability Scanner Jan 2016 - Jun 2016 - Active fuzzer to detect SQL injections, RXSS, LFI and RFI vulnerabilities 3. WeShare: A Coercion Resistant & Scalable Storage Cloud [Undergraduate Thesis] Jun 2015 - Aug 2015 - A Google Chrome Extension to securely share files over cloud storage services. - Github: https://github.com/bawejakunal/MyCrest - Poster: http://www.ieee-security.org/TC/SP2015/posters/paper\_8.pdf 4. A Vnode Level Stackable Encrypted Filesystem [Undergraduate Thesis] Jan 2015 - Mar 2015

 - 256 bit AES-CTR encryption with address space operations on top of WrapFS - Github: https://github.com/bawejakunal/wrapfs-aes

5. Bentley Connect Interoperability Services (BCIS)

 Developed REST API endpoints and prototypes for BCIS to synchronize data and services among various stakeholders of an infrastructure development project.

6. BHEL Online Meeting Management System

May 2013 - Jul 2013

- Currently used by 2000 employees at Bharat Heavy Electricals Limited, Bhopal.
- Salient Features: email reminders, calendar updates, file uploads, employee name search
- Weblink: Demo Presentation

## Certifications & Technical Skills

- Coursera.org Certifications
  - Python For Everybody by University of Michigan (5 course sepcialization) [Certificate Link]
  - Machine Learning Foundations: A Case Study Approach by University of Washington [Certificate Link]
- Technical Skills
  - C, C++, Java, Python, JavaScript, MySQL, HTML5, CSS3, ASP .NET/MVC Framework, Django Framework