Kunal Baweja

Phone: +1-914-689-5240

Email: kunal.baweja@columbia.edu

Education

 Columbia University in the City of New York, USA MS in Computer Science Sept 2016 - Dec 2017

 Birla Institute of Technology & Science, Pilani K.K. Birla Goa Campus, India B.E.(Hons.) in Computer Science, GPA: 7.49/10 Aug 2011 - May 2015

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, Open Redirection, 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)

May 2014 - July 2014

- 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
- Demo Presentation: https://goo.gl/2g8aAo

Certifications & Technical Skills

- Coursera.org Certifications
 - Python For Everybody by University of Michigan (5 course specialization) [Certificate Link]
 - Machine Learning Foundations: A Case Study Approach by University of Washington [Certificate Link]
- Technical Skills

C, Java, Python, JavaScript, MySQL, HTML5, CSS3, ASP.NET/MVC Frameworks, Django, AWS

Weblinks

- LinkedIn https://www.linkedin.com/in/kunal-baweja-99b97136
- Github https://github.com/bawejakunal