Kunal Baweja

515 West, 111th Street. Apt-2F, New York, NY-10025 | +1-914-689-5240 | kunal.baweja@columbia.edu
https://github.com/bawejakunal | https://www.linkedin.com/in/kunal-baweja

---

Education

- **Columbia University in the City of New York, USA** Expected 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

Professional Experience

- **Digital Centers Teaching Internship, Columbia University** Sept 2016 - Present
  - Weekly Python programming lectures and workshops, open to everyone.

- **Research Internship at TSUNAMi Center, National University of Singapore** June 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*

Projects

1. **ParkWizard - Real Time Street Parking Information** Dec 2016
   - Android application to search and crowd information of street parking locations, backed by AWS, Elasticsearch and Google Maps & Cloud Messaging
   - Github: https://github.com/sas2387/ParkWizard

2. **A Secure Sharding Protocol for Open Blockchains [Accepted: CCS-2016]** Oct 2016
   - *ACM Conference on Computer and Communications Security, 2016*
   - Weblink: http://dl.acm.org/citation.cfm?doid=2976749.2978389
   - Authors: Loi Luu, Viswesh Narayanan, Chaodong Zheng, *Kunal Baweja*, Seth Gilbert, Prateek Saxena

3. **Web Application Vulnerability Scanner** Jan 2016 - June 2016
   - Active fuzzer to detect SQL injections, RXSS, Open Redirection, LFI and RFI vulnerabilities

4. **WeShare: A Coercion Resistant & Scalable Storage Cloud [Undergraduate Thesis]** June 2015 - Aug 2015
   - A Google Chrome Extension to securely share files over cloud storage services.
   - Github: https://github.com/bawejakunal/MyCrest

5. **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

6. **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.

7. **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, SQL, HTML5, CSS3, MVC Frameworks, Django, AWS