

# Kunal Baweja

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## Education

- **Columbia University in the City of New York, USA** Expected Dec 2017  
MS in Computer Science, GPA: 4.0/4.0
- **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