

## PRANAV JAIN

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### WORK EXPERIENCE

**Teaching Assistant (Grading)**      **State University of New York at Buffalo, New York**      **Sep-2016 to December-2016**

- Evaluating homeworks, quizzes, midterms and programming assignments for the undergraduate course CSE 410 – Introduction to Computer Security.

**Application Developer**      **BNY MELLON (INAUTIX TECHNOLOGIES), Pune, India**      **Sep-2013 to June-2015**

- Developed projects in accordance with Software Development Life Cycle in Mainframe Technologies including COBOL, JCL, CICS, VSAM and DB2 for the Entitlement Management team for Pershing LLC's NetX360 platform.
- Worked on projects involving batch jobs optimization, development and deployment.
- Formulated complex DB2 queries and optimized the existing ones. Resolved deployment issues on the production releases.
- Worked with the front end teams on fixes and releases for stored procedures and CICS.

### EDUCATION

**Masters in Computer Science, State University of New York at Buffalo, New York**      **(GPA 3.593)**      **Expected Jan-2017**

**Coursework:** Fall '15: Analysis of Algorithms, Information Retrieval, Distributed Systems, Computer Security. Spring '16: Operating Systems, Machine Learning, Applied Cryptography and Computer Security. Summer '16: Database Systems. Fall '16: Algorithms for Modern Computer Systems, Advanced Topics in Computer Security (Seminar).

**Bachelors in Computer Engineering, Pune University, India**      **May-2013**

**Coursework:** Object Oriented Programming in C++ and Java, Data Structures, Analysis of Algorithms, Database Systems, Theory of Computation, Computer Networks, Computer Security, Computer Graphics, Computer Organization, Digital Signal Processing, Computer Networks, Software Engineering, Data Communication, Principles of Programming Languages, Artificial Intelligence, Principles of Compiler Design.

### TECHNOLOGY SUMMARY

- Java, C, Python, SQL, COBOL, JCL, PlusCal, C++, Familiar: HTML/CSS, JS, Golang
- Git, Django, XML, Web APIs, DB2, MySQL, SQLite, SOLR, TLA+, Windows, Linux, Z/OS

### MASTERS PROJECTS

**Sep-2015 to July-2016**

- **OS161:** Operating Systems assignments: Implementing Synchronization Primitives, System Calls, and Virtual Memory support for OS161. Course website (leaderboard): <https://test161.ops-class.org/leaders>. (Language: C)
- **Cappr:** An augmented reality and intelligent suggestion tool to facilitate the New Era customers' shopping experience leveraging the Microsoft Face, Computer Vision and Emotion APIs and using our own algorithms. (Python, Django, HTML, CSS, JS)
- **SQL parser and DBMS:** Created an SQL parser and DB management system from scratch for the Database Systems course. (Environment and technologies: Java, JSON)
- **Machine Learning:** Handwritten digits' recognition using Neural Network, Classification and Regression Comparison, and Comparison between Logistic Regression and SVM as part of the Machine Learning course. (Language: Python)
- **Information Retrieval:** Developed a multilingual Information Retrieval System on Apache Solr that enabled searching data across 5 different languages and included components like content tagging, faceted search, sentiment analysis and summarization.
- **Distributed System:** Model checking Dijkstra's token ring and Hybrid Vector clock algorithms on TLA+ tool using PlusCal code.
- **Computer Security:** Web Security and Symmetric Key Crypto Implementation; E-mail forensics with DKIM; Evaluation of Privacy in DNS Private Exchange as part of Computer Security courses.

### BACHELORS PROJECTS

**Jan-2012 to April-2013**

- **Android security app:** Designed and developed an Android app having random and unique session based authentication password scheme using text and colors. Stronger than traditional authentication schemes and resistant to various attacks including brute force, guessing, shoulder surfing and dictionary attacks. (ENVIRONMENT: Java, ADT, Android)
- **Statistics Management System:** Developed a statistics management system that enabled managers to direct their teams on the portal and allowed fans to view different match related statistics. (ENVIRONMENT: C#, .NET, MS-Access)

### PERSONAL

- 2<sup>nd</sup> Runner Up at the New Era Hackathon 2016.
- Volunteered to raise funds for NGO for educating underprivileged children through charity drives in the office and field trips to orphanages, as part of Bank of New York Mellon's Community Partnership Campaign.
- GRE: 323/340, TOEFL: 107/120. Led the college tennis team to victory at 2 national level inter-college lawn tennis tournaments (2013). Part of the team that won the Pune University rural zone tournament organized by Pune University (2009 and 2010).