

# Mansi Jain

857-316-7418 | jain.ma@husky.neu.edu | www.linkedin.com/in/mansijain9 | www.mansijain.ml

## SUMMARY

Software Engineer with expertise in handling varied responsibilities in cross-functional IT projects. Extensive knowledge of object-oriented software development, data technology, web development and machine learning with understanding of full life cycle of software design process.

## EDUCATION

**Northeastern University, College of Engineering**, Boston, MA **May 2017**  
*Master of Science in Information Systems* GPA: 3.67  
Relevant Courses: Application Engineering and Design, Database Design and Management, Web Tools, Algorithms

**National Institute of Technology (NIT)**, Raipur, India **Jun 2015**  
*Bachelor of Technology in Information Technology* GPA: 3.61  
Relevant Courses: Internet & web technologies, Object Oriented Programming, Operating System, Software Engineering

## TECHNICAL SKILLS

- **Programming Languages:** Java, C++, C, MATLAB
- **Web Technologies:** JavaScript, J2EE, CSS3, HTML5, PHP, AJAX, JSON, Bootstrap, Servlets, JSP, SEO
- **Frameworks:** Hibernate ORM, Spring MVC, Struts/Struts2
- **Databases:** MySQL, SQL Server, Oracle, Microsoft Access
- **Software Applications:** Weka, Eclipse IDE, Git, Netbeans, VMware, Apache Tomcat, WAMP, Xampp

## WORK EXPERIENCE

**Northeastern University** **Jan 2016 - Present**  
*Research Assistant*

- Closely working with Prof. Chaiyaporn Mutsakkisana on an Internet of Things project dealing with latest data technologies.

## ACADEMIC PROJECTS

**Agri-Business Logistics Using Internet of Things (IoT)** **Oct 2015 - Dec 2015**

- Formulated problem for the smart supply of food products to consumers from farmers through suppliers and retailers leveraging IoT, allowing consumers to track purchases and lodge complaints to FDA.
- Implemented a Java Swing Desktop Application built on Ecosystem model making it scalable at global level with extensive use of APIs (JFreeCharts, Orson Charts, Synthetica, iText) and DB4O for data storage.
- Employed UHF RFID for tagging each food product to facilitate FDA Officials identify food mafias and making the process 83.33% faster. And generated timely reports for users using Business Intelligence algorithms.
- Designed flexible dashboards for retailers, suppliers, farmers allowing them to manage inventories and monitor inventory health using temperature sensors, humidity sensors resulting in 20% food waste reduction.

**Smart Prison Management** **Oct 2015 - Dec 2015**

- Spearheaded a team of 5 to remodel existing prison management system by integrating IoT such as RFIDs, GNSS chip, smart cards, health bands and proximity sensors for intelligent management of inmates and tools.
- Architected database model using EER diagram, constructed it using MySQL. Used polygons and spatial data coordinates to monitor movement of prisoners inside prison to avoid prison escapes.
- Archived data using full, incremental backup. Used stored procedures, triggers & functions to store & manage data in database. Built a website using HTML5, CSS3, JavaScript, PHP, AJAX, MySQL and used views and joins to populate data.

**Automated Gastric Cancer Detection by Supervised Machine Learning** **Aug 2014 - May 2015**

- Developed a system for computerized detection of cancer in endoscopic images using machine learning.
- Implemented image pre-processing, region segmentation, feature selection, extraction and classification.
- Scrutinized behaviour of feature set on complex classification models such as SVM, KNN, Bagging, Naive Bayes and Random Forest and led comparative approach to find out best algorithm using Weka and MATLAB.
- Achieved accuracy of 87% on training dataset and 89% on testing dataset using Random Forest Classifier, thus improving the overall system efficiency by 11% and reducing manpower by 40%.