

## Harshal Vijay, Neelkamal

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### EDUCATION:

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- **Northeastern University** | Boston, MA  
Candidate for M.S. in Computer Systems Engineering (**GPA: 4.0\***) **Dec 2018**  
Relevant coursework: Enterprise software design, Data Structures & Algorithms and Concepts of Object Oriented Programming
- **Mumbai University** | Mumbai, Maharashtra, India  
B.E in Electronics Engineering **May 2015**  
Relevant coursework: OOP, Embedded systems, Image processing using MATLAB.

### SKILLS:

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<b>Languages:</b>	Java, Objective-C, Swift, C, C++, C#, SQL
<b>Web Technologies:</b>	JavaScript, HTML5, CSS3, Bootstrap, JSP, JQuery, AJAX, Servlets, .Net
<b>Standards &amp; Frameworks:</b>	Spring MVC, Hibernate, Maven, Spring Security, Servlets, J2EE, DOM, JDBC, JSON, XML, HTTP Client
<b>Databases:</b>	MYSQL, SQLite
<b>Servers:</b>	Apache tomcat, MAMP server
<b>IDEs:</b>	NetBeans, MS Visual Studio, X-Code, Eclipse, MATLAB, Arduino UNO, Code Blocks

### EXPERIENCE:

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- **Tata Consultancy Services** | Mumbai, India (ranked **40** in most innovative companies by Forbes)  
*Associate Systems Engineer* **Nov 2015 – Dec 2016**
  - Worked in DESS workforce on agile delivered projects where I developed iOS applications for Globally recognised marathons like NYC full run and BOA Chicago marathon using both Objective C and Swift
  - Underwent a training program in ASP.Net where I developed a multi user railway ticketing system in ASP.NET framework using C#
  - Application for NYC full 2016 had over **300k** downloads with over **200k** downloads in a single day
- **NCC Telecoms Pvt Ltd** | Mumbai, India (Focused on automation base electronic products)  
*Student Intern* **Mar 2013 – May 2013**
  - Worked on software to automate electronic appliances in residential and commercial premises
  - Worked on android application to provide integrated controls of electronic appliances
  - Worked on 8051 microcontroller for IOT applications

### ACADEMIC PROJECTS:

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- **Image Recognition** | (OpenCV, Java Swing) **July 2017 – Aug 2017**
  - Java application with supervised and un-supervised learning using KNN and K-means techniques.
  - Implemented self-written classifiers using KDTree and Graph data structures.
  - Tweaked processing methods used in Eigen Faces technique to extract features from image.
- **Elastic Computing Stimulator** | (Java Swings) **May 2017 – June 2017**
  - Stimulated scalable architecture to process incoming server requests as in elastic computing.
  - Conducted empirical analysis to examine request processing efficiency of scalable architecture.
- **Online Tutorial portal** | (Spring MVC, Spring security, Hibernate, Maven) **Mar 2017 – Apr 2017**
  - Created an multi role, multi user online tutorial portal for users to post and refer study materials online.
  - Application was constructed on Spring MVC framework and was secured using Spring Security.
  - Database operations were handled using Hibernate with maven integration to resolve dependencies.
- **Crystal generator using Automata Rules** | (Java Swings) **Mar 2017 – Apr 2017**
  - Multithreaded Swing Application to Study crystal growth for variable automata generation rules.
  - Application supports stimulation of crystal generation in rectangular and Hexagonal grids.
- **Jobs portal with weather forecast** | (Spring MVC, Hibernate, Maven, http Client) **Feb 2017 – Mar 2017**
  - Created an online jobs portal for users to post and view online job openings.
  - Integrated Google feeds and maps to get news on employers and direction to their office location.
  - Integrated "Open weather map's" API to get global weather data using http Client.
- **Resistor Measurer and Segregator** | (OpenCV, Robotics, Arduino UNO) **July 2014 – May 2015**
  - Machine for value based segregation of resistors without human intervention.
  - Used vertical robotic arm for physical manoeuvres and OpenCV libraries for image processing.
  - Used Multidimensional vector based classification of features for colour detection.