Karan Tyagi

karantyagi.github.io | linkedin.com/in/karantyagi-21 | github.com/karantyagi tyagi.k@husky.neu.edu | 617-785-5835 | Boston MA 02120 | Available: Jan. - Aug. 2019

EDUCATION

Northeastern University, Boston, MA

Sept. 2017 - Present

College of Computer and Information Science, GPA: 3.8

Expected Graduation: Dec. 2019

Master of Science in Computer Science

Relevant Coursework: Algorithms, Programming Design Paradigm, Web Development, Information Retrieval, Data Mining, Database Systems, Managing Software Development

Institute of Engineering and Technology, Lucknow, India

July 2010 - June 2014

Bachelor of Technology in Computer Science and Engineering, GPA: 3.68

TECHNICAL SKILLS

Programming Languages Java, Python

Web TechnologiesHTML, CSS, Javascript, Bootstrap, jQuery, React, ReduxFrameworksAngularJS, Express, NodeJS, Spring Boot, .NET, MATLAB

Tools Git, Maven, Jira, Jenkins, IntelliJ, Eclipse, Visual Studio, Web Storm, Jupyter Notebook

APIs, Libraries OpenCV, Microsoft Azure, Amazon Web Services (AWS)

Databases MySQL, MS SQL Server, MongoDB (NoSQL)

EXPERIENCE

Teaching Assistant | *Northeastern University, Boston*

Jan. - Apr. 2018, Sept. 2018 - Present

- Conduct labs, office hours and grade assessments for Computer Graphics course
- Assist about 50 students with Graphics programming in C++ and OpenGL

Project Intern | *Indian Ministry of Environment & Forests, Dehradun, India*

June - July 2013

• Designed database and developed a windows app using C#, Windows Presentation Foundation and .NET framework for monitoring fund disbursement under the Integrated Forest Management Scheme of Govt. of India.

PROJECTS

Job Search Made Easy | Northeastern University

May - July 2018

Designed a job portal and implemented it as a RESTful web app for aggregating jobs from APIs like Github Jobs API
and jobs posted by registered recruiters, using Bootstrap, AngularJS, Mongoose, MongoDB, Express, NodeJS

Learning Management System | *Northeastern University*

Apr. - May 2018

- Implemented the faculty module as a RESTful web application | ReactJS, Redux, Spring Boot, Java, JPA, MySQL
- Implemented the student module as a RESTful web application using MEAN stack | Angular, Node, MongoDB

Accessible Screen Navigation and conversational assistant for the Blind | PerkinsHack 2018

Feb. 2018

- Spearheaded the development of a navigation system and integrated various modules to build a prototype
- Programmed the finger detection and beep generation modules using Python and OpenCV

Search Engine | *Northeastern University*

Jan. - Apr. 2018

- Implemented a Web crawler, Indexer, Query processor, Searcher using Java, Apache Lucene and Maven
- Evaluated performance of retrieval models like TF-IDF, BM25, and Query Likelihood model and Lucene

American Sign Language Interpreter | HackWITus 2017

Oct. 2017

- Constructed a dataset of 60,000 instances for training a logistic regression model using AWS Machine Learning
- Detected signs from American Sign Language using Leap Motion hardware and converted them to text using Python

Virtual Mouse

June - July 20

- Developed a windows app in MATLAB for simulating mouse events using real-time video feed from laptop's webcam
- · Overcame the illumination dependency problem by using YCbCr color model along with a manual calibration module

AWARDS

• OvenBot - Display screen navigation for the Blind | Won "Best Accessibility Design"

PerkinsHack 2018

• American Sign Language Interpreter | Won "Best use of Amazon Web Service" Prize

HackWITus 2017

• Silver Medal - Academic Excellence Award | 2nd rank in C.S.E. dept. during bachelor's degree

June 2014