karantyagi.github.io linkedin.com/in/karantyagi-21 github.com/karantyagi

# KARAN TYAGI

Available: Jan. – Aug. 2019

75 Saint Alphonsus St. Boston MA 02120 (617) 785-5835 tyagi.k@husky.neu.edu

#### **EDUCATION**

Northeastern University, Boston, MA

Sept. 2017 – Present

College of Computer and Information Science

Expected Graduation: Dec. 2019

Master of Science in Computer Science, Grade: 3.75 / 4.0

Coursework: Programming Design Paradigm, Info. Retrieval, Algorithms, Data Mining, Web Development

Institute of Engineering and Technology, Lucknow, India

Jul. 2010 - Jun. 2014

Bachelor of Technology in Computer Science and Engineering (C.S.E.)

## **TECHNICAL SKILLS**

Programming Languages Java, Python, C++ (familiar), C (familiar), Racket

Web Technologies HTML, CSS, JavaScript, jQuery, Bootstrap, React, Redux, ASP.NET

Frameworks Spring Boot, Hibernate, Angular, Node, Flask, MATLAB, .NET framework, Win Forms

Databases SQL, MySQL, MongoDB, Mongoose

APIs, Libraries OpenCV, OpenGL, WebGL, Lucene, Amazon Web Services

Tools: Git, IntelliJ, Eclipse, Maven, Atom, Visual Studio, Spring Tool Suite, Anaconda

OS: Linux(Ubuntu), Windows

# **EXPERIENCE**

**Teaching Assistant** 

Northeastern University, Boston

Jan. – Apr. 2018

Tutoring Labs and conducting course-related doubt sessions for Computer Graphics (CS4300)

Project Intern Forest Survey of India (Ministry of Environment & Forests), Dehradun

Jun. – Jul. 2013

- Optimized database; developed UI using C# and .NET framework for data collection and monitoring the disbursement of funds under the Integrated Forest Management Scheme, Govt. of India
- Digitizing fund disbursement process decreased man hours by more than 40%.

## **PROJECTS**

**Job Applications Manager** | *Northeastern University,* Boston

May 2018 - present

Web app to organize and track your job search progress through insightful metrics | Angular, Node, MongoDB Facial Recognition Login | Northeastern University, Boston May 2018 - present

Login module using facial recognition and oAuth2.0 | React, Spring Boot, MySQL, Passport

**Yelp Restaurant Recommendations** | *Northeastern University,* Boston

Feb – Apr. 2018

Used collaborative filtering to recommend new restaurants to Yelp users, using ratings predicted from reviews | Python, NLTK, Jupyter Notebook

Java Search Engine | Northeastern University, Boston

Jan. – Apr. 2018

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

**Virtual Mouse** | *Under graduate major project, IET Lucknow, India* 

May - Aug. 2013

MATLAB Windows application to simulate mouse features like clicking & drag-and-drop using laptop webcam.

# **HACKATHONS AND AWARDS**

- OvenBot Display screen navigation and conversational assistant for the Blind | Won "making a meal"
  Accessibility challenge | PerkinsHack 2018 | Python, OpenCV, Google Cloud OCR API, Watson Speech API
- American Sign Language Interpreter | Won "Best use of Amazon Web Services" | HackWITus 2017
- Emotion Recognizing Music Player | HackBeanPot 2018 | Python, OpenCV, Flask, Microsoft Azure API
- Goju-Ryu Karate, Green-II Belt (4<sup>th</sup> Kyu) | International Academy of Martial Arts, India | Aug. 2015
- Academic Excellence Award Silver Medal, 2<sup>nd</sup> rank in C.S.E. 2014 batch during under-graduation | Jun. 2014