# Utkarsh Jain

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### **FDUCATION**

# UNIVERSITY OF WISCONSIN, MADISON

B.S. IN COMPUTER SCIENCE 2017 - 2019 Expected May 2019 Cum. GPA: 4.0/4.0

# DELHI TECHNOLOGICAL UNIVERSITY

B.Tech. IN Computer Science 2015 - 2017

### LINKS

Personal Website: utkarshjain.xyz Github:// utkarshj1303 LinkedIn:// utkarshj1303

## **COURSEWORK**

#### **GRADUATE**

Computer Vision

#### **UNDERGRADUATE**

Introduction to Artificial Intelligence
Software Engineering
Operating System Design
Medical Image Analysis
Data Structures
Design and Analysis of Algorithms
Database Management Systems
Matrix Methods in Machine Learning (Fall 2018)
Computer Networks (Fall 2018)

#### **MOOCS**

Deep Learning Specialization -Convolutional Neural Networks (Coursera) Become an Android Developer from Scratch (Udemy) Machine Learning (Coursera) Algorithms: Design and Analysis, Part 1 (Coursera)

# SKILLS

#### **PROGRAMMING**

Most Frequently Used:

• C++ • Java

Frequently Used:

• Python • MATLAB • C

Familiar:

HTML • CSS • Android • MySQL

#### **EXPERIENCE**

# CHICAGO TRADING COMPANY | SOFTWARE ENGINEERING INTERN June 2018 - August 2018 | Chicago, IL

- Gained an in depth knowledge of options through an intensive one week course during the first week of my internship.
- Solely responsible for building a vital application for traders in Java. The application displayed information to the traders which was crucial for making decisions about CTC's markets. Traders were very excited to use the application and it was put into production by the end of my internship.
- The project helped me learn about the best practices for writing event driven applications in Java. I used Google Proto Buffers, Java Immutables Library, Java Swing, Netty, Git, Gerrit and Jenkins as well as CTC's internal tools and frameworks.

#### PEER ADVISOR | INTRO TO ARTIFICIAL INTELLIGENCE

Spring 2018 | UW-Madison

• I held weekly office hours to help students with the concepts and homework assignments of CS 540 Introduction to Artificial Intelligence.

## **PROJECTS**

#### STEREO VISUAL ODOMETRY

Implemented a variation of the algorithm described in the paper Howard, Andrew. "Real-time stereo visual odometry for autonomous ground vehicles." using Python and OpenCV 3.0. The aim of the project was to plot the trajectory of a moving vehicle using a sequence of images captured by a camera on top of the vehicle.

#### **ACADEMIC ADVISOR**

Academic Advisor is an Android application that aggregates data from the UW Course Guide, Rate My Professors and UW Madison Course Grade Distribution. The app generates a list of courses based on the users selected range of professor rating, range of average gpa and L&S requirement which they wish to satisfy. The project consists of an Android application and a server which starts the scrapers and then stores the scraped data in a database. A major part of my work on the project was developing the scrapers for Rate My Professors (Java) and the UW Madison Course Guide (Python).

#### ART GENERATION WITH NEURAL STYLE TRANSFER

Implemented a convolutional neural network for transferring the style of one image onto another as part of the Convolutional Neural Networks course on Coursera.

#### IMAGE CLASSIFIER FOR HEALTHY AND RETINOPATHY RETINAS

Implemented a classifier in MATLAB that differentiates between healthy and retinopathy retinas. I used various image analysis techniques to extract features unique to the retinopathy retinas and then used KNN and Logistic Regression for cross validation.

# COMPETITIVE PROGRAMMING

I enjoy participating in coding competitions and solving algorithmic coding questions in my free time. I primarily use C++ for coding competitions.

USA Rank 258 Codechef

Rank 74 OpenBracket Delaware - Invited to Onsite Round

Rank 260 Google Kickstart Practice Round 2018