

## EDUCATION

### UNIVERSITY OF WISCONSIN, MADISON

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

### DELHI TECHNOLOGICAL UNIVERSITY

B.TECH. IN COMPUTER SCIENCE  
2015 - 2017

## LINKS

Personal Website:  
[utkarshj1303.github.io](https://utkarshj1303.github.io)  
Github:// [utkarshj1303](https://github.com/utkarshj1303)  
LinkedIn:// [utkarshj1303](https://www.linkedin.com/in/utkarshj1303)

## COURSEWORK

### GRADUATE

Computer Vision

### UNDERGRADUATE

Introduction to Artificial Intelligence  
Software Engineering  
Intro to Operating Systems  
Medical Image Analysis  
Bioinformatics  
Matrix Methods in Machine Learning  
Computer Networks  
Cryptography  
Data Management for Data Science  
Machine Organization and Programming  
Data Structures  
Design and Analysis of Algorithms

### MOOCS

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

## SKILLS

### PROGRAMMING

Most Frequently Used:

• C++

Frequently Used:

• Java • Python • C • Javascript •  
MATLAB

Familiar:

HTML • CSS • Android • SQL

## EXPERIENCE

### BLOOMBERG | SOFTWARE ENGINEER

August 2019 – Present | New York, New York

- Identified bottlenecks by analyzing performance for different service configurations using a Jupyter notebook/Python.
- Leveraged existing optimizations (use of threads and fibers in C++ to effectively optimize an I/O bound workflow, redis caching etc.) and took into account considerations such as network load on downstream services to design solutions for increasing service throughput.
- Helped **increase the throughput of our main I/O bound C++17 service 3x** by reducing slow service calls.
- Contributed to a dashboard for monitoring service throughput.
- Gained a lot of experience in debugging legacy C++ services through quarterly sprint long rotations where I was responsible for all incoming client bugs.
- Contributed to the migration effort from our old to new stack by adding various features/fixing bugs.
- Worked with Product/UX teams and completely owned roll out of a feature I implemented during hackathon week to simplify user interaction with our frontend.

### 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 in **Java** which was put into production by the end of my internship and heavily used by traders.

## 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

Worked on an Android application that aggregates data from the UW Course Guide, Rate My Professors and UW Madison Course Grade Distribution. The app generated 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. 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 405    Codechef  
Rank 74        OpenBracket Delaware - Invited to Onsite Round  
Rank 260       Google Kickstart Practice Round 2018