

Utkarsh Jain

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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
Github:// [utkarshj1303](#)
LinkedIn:// [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

LET'S CHAT ABOUT

- Cool features in C++, my favorite programming language
- Segment Trees, a cool but lesser known data structure
- Fun things to do in NYC, my favorite city
- Interesting/unique software optimizations
- Surprising applications of Machine Learning

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.

PEER ADVISOR | INTRO TO ARTIFICIAL INTELLIGENCE

Spring 2018 | UW-Madison

- Helped students with the concepts and homework assignments of 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

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
Rank 74
Rank 260

Codechef
OpenBracket Delaware - Invited to Onsite Round
Google Kickstart Practice Round 2018