Utkarsh Jain

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FDUCATION

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

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)

Design and Analysis of Algorithms

SKILLS

PROGRAMMING

Most Frequently Used:

- ()

Frequently Used:

• Java • Python • C • Javascript • MATLAB Familiar:

HTML • CSS • Android • SQL

LETS CHAT ABOUT

- Cool but lesser known data structures like Bloom Filters, Segment Trees
- 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 (number of threads etc) under different loads using a Jupyter notebook/Python.
- 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 team wide migration efforts from our old to new stack by adding various features/fixing bugs.
- Took various internal technical courses including a course in modern C++ and an initial 1.5 month long boot camp which included various topics including Python, Javascript, C++.

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.
- Was solely responsible for my project which consisted of writing two small services in **Java** and a UI using **Java Swing**, all completely from scratch.
- My project which displayed information to traders using heatmaps which was put into production by the end of my internship and was heavily used by traders to capitalize on the volatility in Tesla options at the time.

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 Codechef

Rank 74 OpenBracket Delaware - Invited to Onsite Round

Rank 260 Google Kickstart Practice Round 2018