

# Aman Chopra

Jersey City, NJ-07310 | Email: ac8511@nyu.edu | Phone: +1-(551)-220-7830  
GitHub: Aman-Chopra | LinkedIn: amchopra1 | Google Scholar profile: AmanChopra

## EDUCATION

<b>Courant Institute of Mathematical Sciences - New York University, NY, USA</b>	<b>Dec 2022(expected)</b>
Master of Science in Computer Science	GPA:3.9/4
<b>Manipal Institute of Technology, Manipal, India</b>	<b>July 2018</b>
Bachelors in Information and Communication Technology with a minor in Soft Computing	CGPA: 8.83/10

## SOFTWARE SKILLS AND COURSES

- Languages: C, C++, Java, Python, Node.js, JavaScript, TypeScript | Database Management: SQL, MongoDB, Redis, Firebase
- Machine Learning and Data Processing: R, TensorFlow, Keras, NLTK, NumPy, pandas, Matplotlib, ELK
- Other Technologies: Node.js, Angular, React, Electron, Express, Docker, Kubernetes, Kafka, AWS Certified Developer, Git

## PROFESSIONAL EXPERIENCE

### Amazon, New York City, USA

#### Software Development Engineer Intern – AWS Connect

May 2022 – Aug 2022

- **AWS Identity and Access Management** for Amazon Connect.
- Developed a feature that stops fraudulent agents from using **Cached Invalid Access Tokens** after their password has been reset.

### Samsung Semiconductor India R&D, Bengaluru, India

#### Senior Engineer - India Memory Solutions Team - Host Software

July 2018 – Dec 2020

- Contributed to a **C++ library** called MSVP that enabled test script writers to carry out validation, quality checks, firmware testing, and spec compliance testing of Solid-state drives. This library is the single tool used worldwide across Samsung by 15+ teams to validate storage controllers and firmware developed for vendors like HPE and Dell for all market SSD products.
- Developed a cross-platform desktop GUI application using **Electron** and **AngularJS** which utilized the above C++ library.
- Architected a **tool-agnostic framework** to integrate drive performance analysis and benchmarking features in the above application using third-party tools like Iometer and FIO along with visualization of output data using the Chart.js library.
- Developed a client-side remote test execution utility using Electron and Node.js to execute test scripts via **sockets** and synchronize and upload logs to C++-based servers.
- Designed a fully scalable **distributed system** of interconnected test machines responsible for SSD Validation using the MEAN stack, with the goal being large-scale analysis and management of test execution, test log collection, and result synchronization.

#### Student Intern - India Memory Solutions Team - Host Software

Jan 2018 – June 2018

- Ported the MSVP C++ library from Windows to Linux to make it cross-platform, using the **Boost** library and a custom Operating System Agnostic Layer implementation. Optimized the library to reduce the script execution time by 10%.

### Goldman Sachs, Bengaluru, India

#### Summer Analyst – Human Capital Management Technology

May 2017 – July 2017

- Built a scheduling assistant and a meeting room booking web application, using **Node.js**, **AngularJS**, and **Java**.

## ACADEMIC PROJECTS

### Abstractive Text Summarisation using Transformers New York University

- Built a **Transformer** based model to generate the headlines from the news using the Inshorts news dataset.
- Compared the performance and efficiency of Bi-LSTMs with Attention and Transformer-based Networks for this problem.

### RepCRec – Replicated Concurrency Control and Recovery New York University

- Implemented a **distributed database** with multi-version concurrency control, deadlock detection, replication, and failure recovery. Algorithms used: Available copies approach using strict two-phase locking.

### Multi Modal Multi Environment Performance Comparison on Google Cloud New York University

- Compared performance of Virtual Machines, **Docker** running inside Virtual Machine, and **Singularity** running inside Virtual Machine on two different workloads, MNIST digit classifier using CNN and a Sentiment Analyzer using RNN.

## RESEARCH AND PUBLICATIONS

- Mid Roll advertisement placement using Multi Modal Emotion Analysis. ICANN 2019, Germany
- Real Time prediction of American Sign Language using Convolutional Neural Networks. ICACDS 2019, India
- Comparative Analysis of Statistical Classifiers for predicting News Popularity on Social Web. ICCCI 2019, India
- Prediction of Factors Affecting Amlodipine Induced Pedal Edema and its classification. ICACCI 2017, India

## LEADERSHIP AND AWARDS

- Graduate Teaching Assistant at New York University.
- Led a team of Student Interns at Samsung working on an ELK pipeline for efficient test log collection, analysis, and visualization.
- EOM and Spot Awards at Samsung for outstanding contribution towards Centralized Analysis and Management Platform.