SOHAM TAMBA

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EDUCATION

New York University, Courant Institute of Mathematics Sciences — New York, NY
Master of Science, Computer Science (Concentration: *Machine Learning*) — May 2021

- **GPA:** 3.926
- **Selected courses:** Deep Learning, Intro. Deep Learning Systems, Computer Vision, Natural Language Processing

National Institute of Technology — Goa, India
Bachelor of Technology, Computer Science and Engineering — May 2018

- **GPA:** 9.21/10.00; (Concentration: *Performance Optimization*)

SUMMARY

- 1 year of industry experience in *Software Engineering* through internships and mentorships
- 2 years of experience in *Artificial Intelligence* through graduate research assistantships and coursework
- 1 year of experience in *Performance Engineering* through undergraduate research assistantships and an internship
- Won mentions in top-tier coding competitions such as ACM ICPC – refer to Linkedin profile

TECHNICAL SKILLS – ranked by proficiency

- Programming Languages: Python, C++, Julia, SQL, CUDA, Java, Javascript, VHDL
- Tools: Pytorch, Tensorflow, Pycharm, Git, Linux, Pandas, Jira, CLion, Spring, React, Vagrant, Docker, Postman

EXPERIENCE

Graduate Research Assistant – Deep Learning, **New York University,** New York, NY — June 2020 – Present

- Projects: **Self-driving cars**, **Robust Computer Vision**, **Transfer Learning**
- Implemented software to benchmark driving agents and improved the performance of the driving agent

Software Development Engineer Intern, **Audible,** Newark, NJ — June 2020 – Aug. 2020

- Developed a web application using Spring (Java) and React (Javascript)
  - **Result:** Reduced time required to generate 40% of a monthly report by 93.33%
- Presented and demonstrated to an audience of 70

Software Development Mentor, **Google Summer of Code,** India — May 2019 – Sept. 2019

- Mentored a software development engineer, who passed final evaluations

Software Development Engineer, **Google Summer of Code,** India — May 2018 – Aug. 2018

- Implemented and optimized graph analysis software for the Julia Graphs package
- Published results in Julia's blog: www.julialang.org/blog/2019/02/light-graphs
  - **Sample Result:** Reduced the execution time of PageRank by 63.54%
- Presented at Julia Conference 2018, University College London to an audience of 50

Undergraduate Research Assistant, **National Institute of Technology,** Goa, India — Sept. 2017 – May 2018

- Contributed towards designing efficient and secure communication schemes using Public Key Cryptography
- Contributed towards designing & optimally implementing Machine Learning models on a FPGA using VHDL

COURSE PROJECTS ON ARTIFICIAL INTELLIGENCE

- **Transfer Learning for Medical Imaging;** Applied Computer Vision techniques on chest x-rays. Implementation: github.com/SohamTamba/HealthcareMachineLearning
- **Autonomous Driving:** Trained an agent to drive a car inside the CARLA simulator only using inexpensive data
- **Bird Eye View Estimation:** Trained a model to estimate the layout of the surroundings a car driving on a road
- **Unsupervised Pre-training**: Improved the performance of a data-efficient Computer Vision technique
- Details: sohamtamba.github.io/projects