Ayush Baid

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EDUCATION

Georgia Institute of Technology Aug '19 - May '21 (Exp.)
MS in Computer Science, Specialization in Machine Learning Atlanta, USA
- GPA: 4.00/4.00 | TA for Computer Vision (Fall '19, Spring '20)

Indian Institute of Technology (IIT) Bombay Jul '12 - Jun '17
B.Tech. and M.Tech. in Electrical Engineering, Minor in Computer Science Mumbai, India
- GPA: 9.17/10.00 | Received the Undergraduate Research Award

EXPERIENCE

Amazon May '20 - Present
SDE Intern, Amazon Devices Seattle, USA
- Building a web-app to monitor the state of skills on Alexa enabled devices for multitasking capabilities

Goldman Sachs Jun '17 - Jul '19
Analyst, Risk Division Bengaluru, India
- Upgraded daily risk runtime packaging and prediction model; contributed to **~10% drop in compute**
- Designed a new distributed computing system based on microservice architecture using Kafka and MongoDB, generating consolidated data stores for all model factors and **reduced debug time by ~20%** for teams

Sony Corporation May '15 - Jul '15
Intern, Test Technology Tokyo, Japan
- Developed a cloud-based testing platform for Android applications with on-demand virtual device allocation service
- Injected stubs in the Android source code to bypass network restrictions in Android's native emulators

FOSSEE Scilab Toolbox ✎ Dec '15 - Jan '17
Open Source Contributor Mumbai, India
- Developed and tested signal processing functions for signal processing toolbox, emulating the MATLAB's API

KEY PROJECTS

Deep Front-Ends for SLAM Dec '19 - Present
Advisor: Dr. Frank Dellaert
- Benchmarked 900+ combinations of point based front-end methods to find the top algorithms for SLAM applications
- Unified the API across the different third-party algorithms to create a flexible plug-n-play software for easier use

3D Reconstruction for Hydroponics Agriculture ✎ Aug '19 - Jan '20
Advisor: Dr. Frank Dellaert
- Developed an automated system to produce 3D reconstructions of lettuce crops for precision agriculture application
- Designed a robust algorithm for essential matrix by filtering out repeated texture and improved sampling in RANSAC

Moderation on Reddit using NLP ✎ Feb '20 - Apr '20
- Trained deep NLP models for each subreddit and deployed them to complete sentences on politically charged topics

Deep Learning based Weather Transfer in Images ✎ Oct '19 - Nov '19
- Used cycle GANs for image-to-image translation to convert cloudy images to sunny using new content similarity loss

Laparoscopy Image Enhancement using Bayesian Inference Jun '16 - Jun '17
Advisor: Dr. Suyash Awate, Dr. Shabbir Merchant
- Achieved performance gain by combining smoke removal, speckle removal, and de-noising in a single framework
- Modelled system variables with probabilistic graphical models and designed novel priors for image texture and color
- First author publication and oral presentation at IEEE ISBI 2017 conference ✎

SKILLS

Languages:	Comfortable: C++, Python, Scala | Familiar: JavaScript, Java, MATLAB
Technologies:	Comfortable: GTSAM, Kafka, LaTeX, MongoDB, OpenCV, PyTorch, Scikit-Learn
	Familiar: AWS, Hadoop, Pandas, Pig, Redis, Spark, SQL