

Ayush Baid

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(+1) 678 907 3379
Seattle, WA

Education

Georgia Institute of Technology

MS in Computer Science, specialized in Machine Learning

Atlanta, USA
Aug '19 - May '21

- GPA: 4.00/4.00 | TA for Computer Vision | Relevant courses: Deep Learning, Web Search & Text Mining

Indian Institute of Technology (IIT) Bombay

B.Tech. & M.Tech. in Electrical Engineering, Minor in Computer Science

Mumbai, India
Jul '12 - Jun '17

- GPA: 9.17/10.00 | Received UG Research Award | Relevant courses: Medical Image Processing, Markov Chains

Experience

Amazon

SDE, Alexa Multitasking

Seattle, USA
May '21 - Present

- Enhanced load test framework by chaining CRUD operations to simulate realistic load on database and services
- Working on building developer facing APIs and internal APIs to support skill background and resumption

SDE Intern, Alexa Multitasking

May '20 - Jul '20

- Build a skill state visualizer in D3 using new REST APIs to fetch data, reduced analysis time from ~5 mins to 10 seconds

Goldman Sachs

Analyst, Risk Division

Bengaluru, India
Jun '17 - Jul '19

- Contributed to ~3% drop in compute costs by upgrading the compute batching and runtime prediction model
- Designed a microservice based system using Kafka; reduced debug time by 20% with granular diagnostics tool
- Developed automated monitoring and alert system for data-stores, messaging pipeline, and pricing progress status

Sony Corporation

Intern, Test Technology

Tokyo, Japan
May '15 - Jul '15

- Developed an Android app testing service to support testing on different configurations to virtual devices on-demand

Key Projects

GTSMF: Distributed Structure-From-Motion Software (Advisor: Dr. Frank Dellaert)

Dec '19 - Present

- Developed a distributed front-end module using Dask to produce sparse correspondences between images
- Benchmarked 15000+ combinations of feature detection, matching, and verification algorithms for SLAM front-end

3D object detection from RGB images using privileged information training

Oct '20 - Dec '20

- Developed a 3D object detection for autonomous driving scenarios which uses arbitrary RGB camera rigs
- Used LiDAR data as privileged information during training for improved performance after low number of epochs

Moderation on Reddit by Learning Community Opinion

Feb '20 - Apr '20

- Trained GPT models for ~10 subreddits, and applied prompt completion to understand opinions about political topics

Deep Learning based Image Translation between Sunny-Cloudy Images

Oct '19 - Nov '19

- Used cycle-GANs to translate cloudy images to sunny images using novel content similarity component in the loss

Laparoscopy Image Enhancement using Bayesian Inference

Jun '16 - Jun '17

- Achieved performance gain by combining smoke removal, speckle removal, and de-noising in a single framework
- Modeled system variables with probabilistic graphical models and designed novel priors for image texture and color

FOSSEE Scilab Toolbox

Dec '15 - Jan '17

- Developed and tested APIs for an open-source signal processing toolbox, proving an alternative to MATLAB

Publications

- Baid, Ayush, et al. "Joint desmoking, specular removal, and denoising of laparoscopy images via graphical models and Bayesian inference." 2017 IEEE 14th International Symposium on Biomedical Imaging (ISBI). IEEE, 2017.