

Tanmay Binaykiya

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EDUCATION

Georgia Institute of Technology, Atlanta, GA

Aug 2017 - Present

Master of Science in Computer Science

GPA: 4.0/4.0

Birla Institute of Technology and Science, Pilani, India

Aug 2009 - July 2015

Bachelor of Engineering in Computer Science

GPA: 7.85/10.0

GRADUATE COURSES

Natural Language, Advanced Computer Vision, Artificial Intelligence, Computer Vision, Computer Graphics

TECHNICAL SKILLS

Languages: Java, Python, Javascript, C

Technologies: AWS, Docker, Spring Boot

Big Data Technologies: Apache Spark, PyTorch, NumPy

EXPERIENCE

Uber Technologies

May 2018 - July 2018

Software Engineer Intern

Palo Alto, CA

Technologies Used: Apache Spark, Grafite, Docker, Java

MapCrunch Reliability

Developed a reliability framework for Apache Spark based map metrics computation pipeline

Catch Map Errors (CatchME)

Prototyped a Hidden Markov Model's emission probability-based algorithm to detect Map Errors using drivers' GPS traces

BlueJeans Networks

June 2016 - July 2017

Senior Software Engineer

Bangalore, INDIA

Technologies Used: AWS, Spring Cloud, Wowza, NodeJS, Java

Next Generation Platform

- Redesigned and migrated the existing technology stack to Amazon Web Services Cloud
- Developed a Spring-Boot based software platform to facilitate deployment of existing monolith as microservices
- Improved system load capacity from 500 RPS to 100k RPS and uptime from .99 to .9999

Social Media Gateway

Developed a AWS Lambda-based NodeJS solution to enable live streaming video conferences into RTMP entry points providing in-meeting Facebook Live broadcast capabilities achieving a time-to-market of **14 days**

BlueJeans Networks

May 2015 - June 2016

Software Engineer

Bangalore, INDIA

Technologies Used: AWS, Wowza, Java

Autoscaler Service

Developed a transcoder auto provisioning system based on real-time usage patterns reducing AWS usage costs by 55%

BlueJeans Networks

Jul 2014 - Jul 2015

Software Engineer Intern

Bangalore, INDIA

Technologies Used: Kubernetes, Selenium, Gatling, NodeJS, Scala, Java

- Developed a proof-of-concept to deploy the OnVideo stack on AWS EC2 using Kubernetes
- Developed a Web UI Automation framework to enable multi-browser, multi-node, multi-device concurrent testing
- Developed a stress testing framework to simulate peak loads

National Aluminium Company Limited

May 2012 - Jul 2012

Software Development Intern

Bhubaneswar, INDIA

Technologies Used: ASP.NET

Ojaswi Tech

Graphic Design Intern

Jun 2011 - Aug 2011

Pune, INDIA

Technologies Used: Adobe Photoshop, Adobe Illustrator, Adobe After Effects

- Developed UI mocks for a client websites and developed UI elements standards.
- Developed Marketing Presentation Videos for clients

AWARDS & HONORS

Quarterly Award, BlueJeans Networks

July 2017

TEACHING EXPERIENCE

Georgia Institute of Technology, Atlanta

CS 4510 Automata & Computability

Spring 2018

Birla Institute of Technology & Science, Pilani

Creative Multimedia

Spring 2014

Computer Graphics

Fall 2013

Computer Graphics

Spring 2013

Human Computer Interaction

Fall 2012

ACADEMIC PROJECTS

Coreference Resolution

Apr 2018

Built a coreference resolution pipeline using an Attention-Based-LSTM

Dependency Parser

Apr 2018

Built an arc-standard transition-based Dependency Parser

Sequence Labeling

Mar 2018

Implemented a Part-of-Speech tagger based on Hidden Markov model and BiLSTM - Conditional Random Field models

Text Classification

Feb 2018

Implemented lyrics classifiers based on Naive Bayes, Perceptron, Logistic Regression techniques

Morse Code Recognition

Dec 2017

Implemented a Morse code recognition system through the use of Hidden Markov Models

Scene Classification with Deep Learning

Nov 2017

Built a vanilla CNN and Transfer Learning based scene classification pipeline

Face Detection

Nov 2017

Built a face detection pipeline based on Dalal & Triggs method for pedestrian detection using HoG descriptor

Surface Reconstruction from Point Cloud Data

Nov 2017

Water Tight Surface Reconstruction of 3D Point Cloud Data using the Ball Pivoting Algorithm

Automatic Image Segmentation using Expectation Maximization

Nov 2017

Implemented Image segmentation using K-Means, Gaussian Mixture Models employing the Bayesian Information Criterion

Dead-end Isolation Game AI

Aug 2017

Developed a dead-end isolation game player based on Minimax Algorithm using Alpha-Beta pruning

Scene Recognition with Bag of Words

Oct 2017

Developed a scene recognition pipeline with Bag of SIFT and linear SVM classifier

Local Feature Matching

Sep 2017

Developed a local feature matching algorithm implementing Harris Feature Point Detector and implemented a SIFT-like algorithm for a local feature descriptor