ANSHU AVINASH

☎ +919005671853　　　　　　　　　　　　　　　　　　　　　　　@ anshu.avinash35@gmail.com

EDUCATION

Year	Degree	Institution/Board	CPI/%
2015	BTech-MTech Dual Degree (CSE)	IIT Kanpur	PG: 9.6/10.0 UG: 9.1/10.0
2010	XII	KV ASC Center(S), Bangalore (CBSE)	96.8%
2008	X	KV ASC Center(S), Bangalore (CBSE)	98.2%

WORK EXPERIENCE

AdWyze　　　　　　　　　　　　　　　　　　　　　　*Senior Software Engineer, July 2016 - Present*
  ▶ Integrated multiple advertising and analytics channels on the AdWyze platform, written in *Ruby on Rails*. Created a generic framework for addition of new advertising and analytics channels

  ▶ Worked on handling several performance issues on backend consisting of PostgreSQL DB, MongoDB and the background jobs framework. This also involved setting up monitoring for key backend metrics using Grafana, Graphite and collectd

LinkedIn　　　　　　　　　　　　　　　　　　　　　　　*Software Engineer, July 2015 - June 2016*
  ▶ Worked in the communication team which handles LinkedIn's outbound emails, SMS and push notifications. Integrated several external SMS providers using SMPP protocol. Wrote generic code for adding new SMS providers

  ▶ Worked on several strategies to bring down failure rates of outbound SMS, including building a retry mechanism using Kafka

  ▶ Worked with pig and hive to analyze different events generated by the communication team

INTERNSHIPS

Self Tuning Optimizer in MariaDB　　　　　　　　　　*Google Summer of Code, May-August 2014*
  ▶ Replaced the hard-coded constants in MySQL server optimizer with self tuning coefficients, resulting into better query plans

  ▶ Involved understanding MySQL server internals, coding in C++, version control using git, building a project using cmake

Canary services for Facebook infrastructure　　　　*Facebook Inc., Menlo Park, USA, May-July 2013*
  ▶ Learnt about existing tools that various teams in Facebook use for deploying canary services

  ▶ Consolidated these tools into a more generic framework

  ▶ Involved working with large scale distributed systems that stand at foundation of Facebook infrastructure, advanced python coding, git, MySQL etc.

PROJECTS

Library for handling large binary objects in Haskell (*M.Tech Thesis*)　　　　*July 2014 - May 2015*
  ▶ Built a library for handling large binary objects (blob) in Haskell

  ▶ Provided lock free concurrent access to blobs

Distributed web application for IIT Kanpur　　　　　　　　　　　　*Dec 2012 - May 2015*
  ▶ Designed a web application to bring all the activities involving logistics and information organization at a central place

  ▶ Used Angular Dart for frontend development, Scala and Titan (Cassandra) database in backend, Jenkins for deployment

Detection of malicious nodes in unstructured P2P (*Topics in Distributed Systems*)　　*Aug-Nov 2013*
  ▶ Implemented Group Malicious Detection algorithm, similar to Too Late algorithm for detection of malicious peers in an unstructured P2P network using Java and PeerSim

Higher Order Functions in C++ (*Topics in Object Oriented Language Implementation*)　　*Jan-April 2014*
  ▶ Implemented a type-safe framework of C++ class templates (called Functoid) for higher order functions

Browser-X: A simple browser written in Haskell (*Functional Programming*)　　*Jan-April 2013*
  ▶ Implemented a basic browser in Haskell with both GUI and CLI using Network.HTTP, gtk, webkit and sqlite3

Other Course Projects
  ▶ **Structure from Motion**: Estimated 3-D structures from 2-D image sequences coupled with local motion signals

  ▶ **Compilers**: Created a compiler using LEX/YACC for the ADA language

  ▶ **Computer Networks**: Implemented ipconfig utilty to display information about all network interfaces

SCHOLASTIC ACHIEVEMENTS

  ▶ Secured 2nd position in Kendriya Vidyalaya Sanghatan (KVS) at national level in class X CBSE

  ▶ Received Kishore Vaigyanik Protsahan Yogna (**KVPY**) scholarship in 2008

  ▶ Received National Talent Search Exam (**NTSE**) scholarship in 2008

  ▶ Attended International Mathematics Olympiad Training Camp (**IMO-TC**) organized at HBCSE, TIFR in 2009

  ▶ Received **Academic Excellence Award** for year 2010-11 and 2011-12 at IIT Kanpur