

ANOOP RANGANATHAN SANTHOSH

215, Littleton St, Apt 6, West Lafayette, IN - 47906

Phone : 765-610-8296

Email : asanthos@purdue.edu , anoopvkm@gmail.com

WORK EXPERIENCE

Amazon, Seattle

Software Engineering Intern

05.2017 – 07.2017

- Worked with a team responsible for restricting parties with denied access from conducting transactions on Amazon.
- Implemented a scalable solution for evaluating the performance of various matching algorithms for identity verification.

Samsung R & D Institute, Bangalore

Senior Software Engineer

03.2016 – 07.2016

Software Engineer

07.2014 – 02.2016

- Worked on scaling up server capacities for a key Samsung service by investigating various asynchronous event handling designs and achieved a 50% increment in request handling capacity.
- Designed and implemented REST APIs (backend server) for an event (Games, Movies etc.) discovery application.
- Worked on a duplicate content detection system based on text similarity, tackling the challenge of detecting duplicate events from a set of million events under strict time constraints.
- Experience in efficient data modelling and database deployment (data replication, sharding).
- Experience in agile software development and working with collaborative international teams.

Samsung R & D Institute, Bangalore

Software Engineering Intern

05.2013 – 07.2013

- Worked on automating Samsung SSD testing lab for large scale testing of company devices. Successfully scaled up the system by parallelizing the operation, designing an efficient scheduler and fault detection mechanism for the system.

EDUCATION

Purdue University, West Lafayette, Indiana

08.2016 – 05.2018

MS in Computer Science

GPA : 4.0 / 4.0

Coursework: Statistical Machine Learning, Algorithm Design, Operating Systems, Data Mining, Information Security, Parallel Computing, *ML methods for NLP, Networks, Compilers*

IIT Madras, Chennai

07.2010 – 07.2014

B.Tech in Computer Science & Engineering with minor in Operations Research

GPA : 8.73/10

Coursework: Kernel Methods, Machine Learning, NLP, Operating systems, Compilers, Computer Architecture, Algorithms, Graph Theory, Probability, Operations Research, Software Engineering.

PROJECTS

- **Machine Translation** (Fall 2016) Implemented a statistical machine translation model to transform sentences from French to English, specifically IBM models. Successfully developed a language model and Expectation-Maximization algorithm to estimate translation model parameters.
- **Parallel Gomoku** (Spring 2017) Implemented a parallel AI player for the board game Gomoku. Evaluated performance improvements of multiple parallel tree search algorithms (PV Split, Parallel DFS) over serial implementation.
- **Dynamic Program and Library Loading** (Fall 2016) Added functionality to dynamically load programs and libraries to Xinu operating system. Implemented parsing ELF files, loading various segments and calculating addresses in relocation table.
- **Satellite Ground Station Communication** (Spring 2014) Implemented link layer for communication between satellite and ground station for IIT Madras Student Satellite (IITMSAT). Designed a model to ensure maximum and reliable transmission over an unreliable connection spanning over 16 – 24 minutes in a day. (<https://goo.gl/HMoSqi>)
- **Automatic Text Summarization** (Fall 2013) Implemented a text summarization engine using lexical chains and experimented with several heuristics to identify strong chains and construct sentences from them.
- **Spell Correction Engine** (Fall 2013). Implemented a context sensitive spell check for sentences using mixed tri-grams.

POSITIONS OF RESPONSIBILITY

- **Software Project Coordinator/TA** (January 2017 – Present): Responsible for managing semester-long undergraduate software engineering projects at Purdue. Provides guidance in technical and agile development aspects of the project.
- **Project Head, National Service Scheme** (Aug 2011 – April 2012): Managed a team of 8 volunteers producing science videos for underprivileged schools in vernacular languages.

SKILLS

- **Languages:** Java (professional experience), C, C++ , Python, MATLAB, HTML, JavaScript(limited experience).
- **Framework and Technologies :** SQL, MongoDB, Tomcat, Kafka, JAX-RS, AWS(Kinesis , Redshift), REST, MPI