

Kanth Kumar DAYANAND

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EDUCATION

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| Expected MAY 2017 | Master of Science in COMPUTER SCIENCE GPA: 3.70/4.00 Rochester Institute of Technology , Rochester, New York COURSE WORK: Foundation of Algorithms, Distributed Systems, Advanced Algorithms, Parallel Computing, Web Services & SOA, Foundation of Computer Networks |
| JUNE 2012 | Bachelor of Engineering in INFORMATION SCIENCE GPA: 3.42/4.00 University Visvesvaraya College of Engineering , Bangalore, India |

TECHNICAL AND PROGRAMMING SKILLS

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| Programming Languages: | Java, JavaScript, Python, C and C++ |
| Frameworks & Tools: | Spring, RxJava, Hystrix, Akka, Map-Reduce, Mockito, JMockit, Git |
| Web: | NodeJS, RESTful, SOAP, AngularJS, Bootstrap, HTML5 and CSS |
| Databases: | MongoDB, SQL, MySQL, JDBC |

WORK EXPERIENCE

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| JUNE 2016 - DEC 2016 | Software Engineer Co-op at INTUIT, San Diego, California TurboTax Developed a tool for cross-checking the <i>Jira</i> issues with <i>GitHub</i> commits to automate the pre-release activities of our backend services. Java, Spring, Bootstrap Worked on implementing the Circuit-Breakers for Java services to enable resilience using Netflix Hystrix. Implemented asynchronous caching to store financial document providers information and reduced our service response time by ~2seconds |
| SEPT 2015 - MAY 2016 | Graduate Research Assistant, Rochester Institute of Technology Designed and developed a website (PencilPuzzle) for listing the puzzles and lab assignments related to introductory Computer Science topics. AngularJS, Bootstrap |
| JUN 2015 - AUG 2015 | Software Engineering Intern at CISCO, San Jose, California VxLAN - Virtual Extensible LAN Developed a CLI command for comparing the run-time configs with the configs stored in <i>In-memory</i> database. Implemented a consistency check feature for VxLAN component deployed in dual homed environment - vPC |
| OCT 2012 - AUG 2014 | Software Engineer (Consultant 4) at UNISYS, Bangalore, India Unisys Content Management System (Infolmage) Developed reusable Portlets and Plugins in Liferay portal. Java, JavaScript (D3.js), AJAX uWork - Web client for document management system Developed UI templates and client-side APIs for consuming RESTful services using JavaScript libraries. |

PROJECT WORK

Dataflow Network

Developed an infrastructure using Akka concurrency framework allowing the user to write sequential programs that forms the computational "vertices" of dataflow network and communicate via channel specified as "edge". Java, Akka

HyperLogLog - Near optimal cardinality estimation algorithm

Implemented HyperLogLog algorithm for approximating the cardinality of large data sets using Map-Reduce paradigm.

Distributed File System

Implemented a *Hadoop* like Distributed File System. Features include basic File System commands (*mkdir*, *ls*, *put*, *get*), File Namespace, Block Replication, Fault Tolerance using *HeartBeat* mechanism. Java

State Synchronization Protocol

Implemented a UDP based protocol for transferring the file/text reliably by synchronizing states between the client and server. Features include Client *roaming*, *HeartBeat* mechanism. Java, Protocol Buffers

Content-Addressable Network (CAN)

Implemented scalable, P2P *distributed system* that provides hash table functionality for searching files on internet-like scale. Features include Node join and leave, File insert and retrieval, Search query routing. Java

Ricart and Agravala - Mutual Exclusion Algorithm for Distributed Systems

Implemented an algorithm for mutual exclusion on a distributed system. Functionality includes *Heart Beat* mechanism for controlling the process entering into Critical section. Java

SCHOLARSHIPS AND AWARDS

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| RIT 2014 | 30% waiver in tuition fees as merit scholarship. |
| UNISYS 2013 | <i>Innovative Thinker</i> award for designing and developing the iOS app |