Kanth Kumar DAYANAND

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EDUCATION

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

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

JUNE 2016 - DEC 2016	Software Engineer Co-op at INTUIT, San Diego, California *TurboTax* Developed a tool for cross-checking the *Jira* issues with *GitHub* 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 that decreased 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 *In-memory* 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 (InfoImage)* 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

RIT 2014	30% wavier in tuition fees as merit scholarship.
UNISYS 2013	*Innovative Thinker* award for designing and developing the iOS app