

Ramachandra Kamath Arbettu

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Alfred-Messel-Weg, 10A WG-61, 64287, Darmstadt, Germany

Programming

JAVA, Python, Batch
and Shell scripting
(Proficient)
RxJava, C and C++
(Beginner)

Web Technologies

Hibernate, REST,
JavaScript and JSON

Tools

ControlM, CFT, SVN/GIT
Source Version
Control, MySQL
Database, LaTeX

Languages

English (Proficient),
German (Elementary
proficiency)

Summary

A post graduate student in the field of Distributed Software Systems(DSS) with an excellent knowledge in OOP. I possess deep understanding of software development and maintenance of applications, in addition to basic understanding of production support and releases. I have also worked closely with infrastructure teams to plan and execute Disaster Recovery Preparedness(DRP) of applications. My association with IT industry gave me an exposure to work in multi vendor Onsite-Offshore model. As part of my post graduation I worked in the area of Software Defined Networking, event based systems and reactive programming.

Experience

- 05/15 - 01/17 **Student Research Assistant** Software Technology Group, TU Darmstadt
Developed an eclipse plug-in for a project CROSSING . Plug-in was responsible to guide inexperienced user with simple questions and derive an encryption option best suited in the given scenario. A light weight modeling tool named Clafer to generate different combinations of encryption along with Java.
- 05/16- 10/16 **Student Research Assistant** Mobile Systems and Mobile Networks, Fraunhofer SIT
Worked on development of an automated Software Defined Networking(SDN) based end to end security solution, AutoSec. Developed an SDN application to configure and monitor network with the help of REST interfaces exposed in OpenDayLight controller. Python and Jscript were used to render data to UI.
- 10/15- 04/16 **Student Research Assistant** Cloud Computing, Identity and Privacy, Fraunhofer SIT
Worked on test suit setup of an email security product named Volksverschlüsselung. Which facilitates end to end security of emails. Worked on play framework along with MySQL db, AngularJS and JUnit.
- 06/12 - 08/14 **Senior Project Engineer** Credit Agricole CIB, Singapore
I was responsible for development and integration of Java based solutions for a reconciliation and KYC applications of one of the largest investment banks from France. I was also a SPOC between development and application support teams for minor production releases and yearly DRP exercises. Successfully lead a migration of one of the critical applications from DMZ to local network with minimal downtime. During this tenure I have extensively used BMC ControlM scheduler and Cross-platform File Transfer(CFT) for integration of application with other external and internal applications.
- 06/10 - 08/14 **Project Engineer** Credit Suisse PB, Bengaluru, India
Worked as an offshore engineer for one of the private banks based out of Switzerland. My contribution included application development and integration with ControlM batches. Development was carried out in UNIX environment with JAVA being programming language.
- 01/10 - 05/10 **Consultant** Symphony Technology Group, Bengaluru, India
I contributed to field level security and integration of modules for Expense Management System(EMS) application in product line management systems. GWT and J2EE technologies were used for development of the application.

Education

- 09/14 - 01/17 **Master of Science (GPA 2.1)** Technische Universität Darmstadt, Germany
Distributed Software Systems
Main subjects: Database Systems, Event Processing, Network Security, Business Intelligence and Data Warehousing, Software defined Networking
Title of the Thesis: "Automatic Refactoring of Android Applications to Reactive Programming"
Guide: Prof. Dr. -Ing. Guido Salvaneschi
- 08/05 - 05/09 **Bachelor of Engineering** MS Engineering college, Bengaluru, India
Computer Science.
Main subjects: Network Applications, Analysis and design of algorithms, Database Systems, Finite automate and formal languages, Logical design.
Title of the Thesis: "Congestion control in networking with border patrolling".

Academic Projects

- 10/15-02/16 **Implementation of Real-time Monitoring Agent** P2P Systems Engineering group
Implemented a distributed mobile agent process on OpenVswitch to monitor Software Defined Network for any anomalies. Used RYU controller and introduced four new messages in OpenFlow1.0 protocol to manage the agents. Python and C were languages of implementation.
- 10/15-03/16 **War-driving application for Darmstadt** Telecooperation Group
Implemented an android based solution to map wifi access points of Darmstadt to their GPS locations. Locations were calculated with the help of trilateration and same were mapped on google map with the help of REST service. Java along with Hibernate were used for back-end development.

Publication

Arbettu, Ramachandra Kamath; Khondoker, Rahamatullah; Bayarou, Kpatcha; Weber, Frank
Security analysis of OpenDayLight, ONOS, RoseMary and RYU SDN controllers
Proceedings of Networks 2016, 17th International Network Strategy and Planning Symposium, September 26-28, 2016, Montreal, Canada [pdf]