

# Harini Gunabalan

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 [harinigunabalan.github.io](https://github.com/harinigunabalan) |  [github.com/harinigunabalan](https://github.com/harinigunabalan) |  [@harinigunabalan](https://twitter.com/harinigunabalan)

## Education

### Technical University of Darmstadt (Germany)

Master of Science – Distributed Software Systems

Oct 2013 – Present  
CGPA 2.03 (Scale: Best 1.0 and Worst 5.0)

### Madras Institute of Technology, Anna University (India)

Bachelor of Technology – Information Technology

Aug 2007 – May 2011  
CGPA 8.7 / 10

## Professional Experience

### SAP Research, Germany & TU Darmstadt:

Master Thesis Student

December 2015 – Present

**Predictive Auto scaling & Feedback Driven Development (FDD) for Cloud Applications:** Research on leveraging the Cloud monitoring data for Predictive Auto scaling and FDD. Multi-dimensional data modeling is performed to achieve a model for efficient prediction.

### SAP Research, Germany:

Graduate Student Researcher

July 2015 – November 2015

Worked on Software Development Tools (SAP Web IDE) for the HCP, Eclipse Plugin Development for Java Developers on the Hana Cloud Platform, and SAP Web Analytics framework. Research work is a part of the [CloudWave Project](#), an EU funded research project.

### SAP SE, Global Headquarters, Germany:

Intern, Center of Expertise, EMEA

April 2015 – June 2015

Performance Analysis of SAP System metrics such as work processes, CPU consumption etc, at the production environment. Analyzing MDX queries, snapshot overviews for each of the Application Servers, Error messages, and Performance Statistics Reports.

### Deloitte Consulting India Private Limited:

Business Technology Analyst

Jun 2011 – Sep 2013

Provided custom SAP ERP solutions to Clients from USA, Germany and France. Developed ABAP RICEF (reports, conversions, interfaces, enhancements and forms) objects, module pool programs, Master data handling through conversions/interface programs.

## Research/Coursework/Hackathon Projects

### 1. Context Aware Opportunistic Sensing:

LocalSiri (Grade: 1.0; Top Scorer)

Oct 2014 – Feb 2015

A Sensing System that opportunistically collects location information adapting to the User's device context providing a Location based forum. It leverages IBM Bluemix Cloud services for Storage, Processing and push notifications (using Google Cloud Messaging).

### 2. Decentralized Social Networking using WiFi Direct: WiFriends (Grade: 1.3; Top Scorer)

Oct 2014 – Feb 2015

Research on Android Wi-Fi P2P API for the overlay creation and dynamically discovery of peers in proximity to exchange profile information in a secure manner by data encryption using pre-shared key (AES 256) exchanged once via NFC, during adding friends.

### 3. Middleware Enterprise Project:

Amazon

Oct 2013 – Mar 2014

An Enterprise Solution that provides logistics services to customers using Java EE components (EJB3, JMS, JPA, and MVC Architecture)

### 4. Android: Audio Recorder

Oct 2013 – Feb 2014

### 5. Bachelor Thesis: Hybrid Intrusion Detection Systems (HIDS) using Data Mining Techniques

Jan 2011 – Apr 2011

A Hybrid (Signature and Anomaly) IDS to identify Denial-of-Service attacks using pattern mining and clustering algorithms.

### 6. Student Overflow\*\* Availability of places in Library or other similar places using Android Geofencing

Jul 2015

### 7. DroneSpot\*\* Leveraging 5G to provide internet hotspots through drones

Feb 2016

\*\* Hackathon projects - For other Hackathon projects click [here](#)

## Skills, Achievements and Co-curricular Activities

### Language & Technical Skills:

Languages: Java, Android, Node.js, JavaScript, jQuery, ABAP, HTML5, CSS3, Open UI5, REST APIs, Bootstrap, Fiori UX  
Platform/DB: Cloud Foundry, SAP HCP, IBM Bluemix, OpenStack, Elastic Search, Cloudant, SAP HANA, MS SQL, MySQL, Hibernate  
IDE/Others: Git, Eclipse PDE, IntelliJ Android Studio, SAP Web IDE, Brackets, MATLAB, LaTeX, Linux, Windows, Apache Jmeter

### Conferences/Awards:

- MAKI Female Student Travel award winner to attend the [Grace Hopper Conference - Houston, 2016](#).
- [Google travel grant Award 2015 winner](#) to attend [Hack in the Box Security Conference 2015, Amsterdam](#).
- [Speaker](#) - GDG Rheinmain Groups on the topic [Machine Learning with TensorFlow library](#)
- Student Representative of SAP to present a prototype of DroneSpot at the [Mobile World Congress conference, 2016, Barcelona](#).
- SAP Innojam Hackathon (Coding the future, Berlin) Winner – Ticket to participate at [SAP TechEd Conference, 2015, Barcelona](#)
- Winner (3<sup>rd</sup> place) of the [RheinMain Hackathon](#) -University of Mainz, & Participant in the Hybris CloudHackfest.
- SAP Fast Track Award (Special Mentoring and Workshops for top 10% Students) & SAP Peer to Peer Recognition Award winner
- Financial Scholarship of TU Darmstadt for Master Thesis & Topper in both Lab Projects during Winter Semester, 2014 – 15.
- Best student in Communication Networks by Prof. Dr. Ralf Steinmetz to attend E-Finance Lab Best Students Event, Frankfurt, 2015.
- Attendee - [Code Talks conference, Hamburg, 2015](#), sponsored by [Techettes, Frankfurt](#) and Codetalks

### Volunteering / Activities:

- Mentor - [Big Sister Mentoring and Networking, TU Darmstadt](#) & Coach - [Rails Girls Workshop](#) & [Rails Girls Summer of Code 2016](#)
- Member of the Techettes Frankfurt, GDG Rheinmain, Sysfers
- Technical Reviewer of the "Machine Learning with TensorFlow" video Tutorials with [Packt Publishing](#).
- Spot Award-2013 Winner at Deloitte for mentoring technical new-hires, & Oracle certified Java Programmer (100% score)