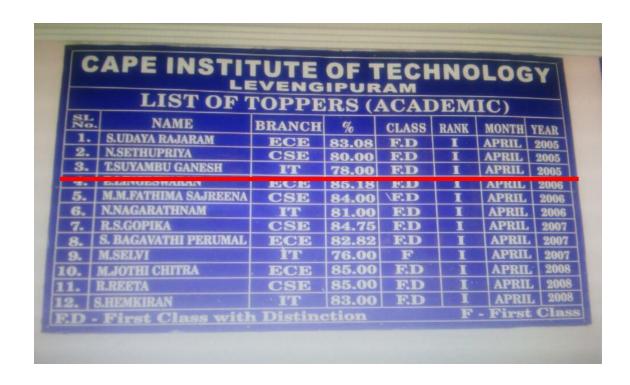
# Suyambu Ganesh. T

**Profile** 

### Academics – Department Topper

- B. Tech-Information Technology: 2001 2005
  - 78.21%, Distinction, (Department First Rank)
  - Cape Institute of Technology, Affiliated to Anna University, Chennai
- Department Topper My name in Honors Board



#### **Professional Career**

- I started my career in 2006 at **Comodo** as Software Engineer
- Then joined Infosys and worked for **Boeing** and **Toyota** till 2010
- Joined KLM in 2010 for Check-in Kiosk team
- Travelled to Netherlands in 2011 to work for KLM
- At KLM, played various roles as Techlead, Architect and was part of Innnovation team.
- Introduced Application Modernization and improved developer productivity and reduced lot of costs.
- Developed interests in IoT and Distributed systems, created
  MQTT Broker
- In 2016, discovered Toon and Joined **Quby** with passion for IoT.
- At Quby, Undertook huge challenge in move to the cloud project and microservices platform at various levels as Techlead, Architect and Software Engineer.















### Accolades @Boeing





# Congratulations

You have received the following Pride@Boeing award!

T Suyambuganesh Infosys

Achievement Award (100 points) September 29, 2009

Nominated by: Karen Crabtree

This award is given in appreciation of your contributions to the successful development and implementation of the PlannedAd re-write efforts. I congratulate you and thank you for your efforts.

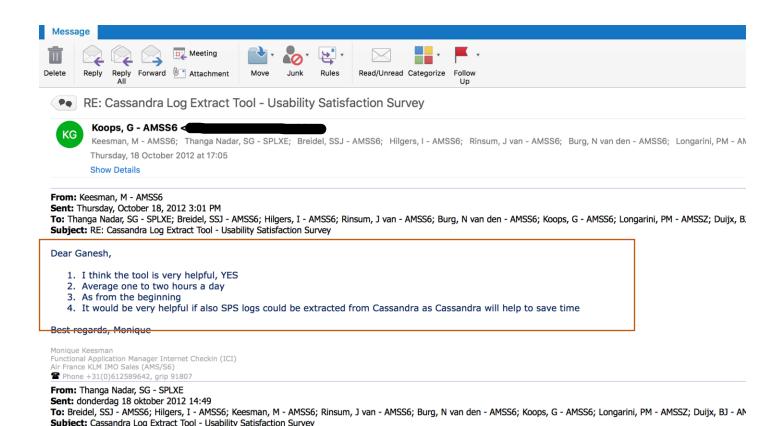
#### Accolades @KLM for Best Innovation

Created Functional/Incident Analysis System, which integrated the following services,

- Check-in service
- Dep. Control System(Altea)
- Internet check-in
- Mobile Check-in
- Kiosk Check-in
- Sales Process Service
- Ancillary Service

#### Benefits:

- Helped functional team
- Faster issue identification
- Reduced MTTR
- Saved 2-4 hours a day per Analyst
- Saved €250,000+ annually



Dear All,

Importance: High

This is regarding a survey on the usability satisfaction for using Cassandra Log extracting tool for log analysis.

Can you please spend two of your precious minutes to reply back to this email with short answers for the below questions?

- 1. Was this tool useful and helpful for log download and analysis? (Yes or No)
- 2. How many hours did it save you daily?

### Accolades @KLM

RE: Cassandra Log Extract Tool - Usability Satisfaction Survey



#### Hilgers, I - AMSS6

Thanga Nadar, SG - SPLXE; Breidel, SSJ - AMSS6; Keesman, M - AMSS6; Rinsum, J van - AMSS6; Burg, N van den - AMSS6; Koops, G - AMSS6; Longarini, PM - AMSSZ; Duijx, BJ - AMSS6 Thursday, 18 October 2012 at 14:50

**Show Details** 

GTIP: +3120 04039/1, MODIIE: +31 012101404

E-mail:

From: Thanga Nadar, SG - SPLXE

Sent: Thursday, October 18, 2012 2:49 PM

To: Breidel, SSJ - AMSS6; Hilgers, I - AMSS6; Keesman, M - AMSS6; Rinsum, J van - AMSS6; Burg, N van den - AMSS6; Koops, G - AMSS6; Longarini, PM - AMSS2; Duijx, BJ - AMSS6

Subject: Cassandra Log Extract Tool - Usability Satisfaction Survey

Importance: High

Dear All,

This is regarding a survey on the usability satisfaction for using Cassandra Log extracting tool for log analysis.

Can you please spend two of your precious minutes to reply back to this email with short answers for the below questions?

- 1. Was this tool useful and helpful for log download and analysis? (Yes )
- 2. How many hours did it save you daily?[Hilgers, I SPLXK] 2 4 hrs a day
- 3. How many months you are using this tool? [Hilgers, I SPLXK] 5 months
- 4. Your feedback please....[Hilgers, I SPLXK] The period of 5 months most be decreased with the 1 month Cassandra logfiles were unavailable.

Your reply to this email along with your feedback on this tool will really help us to continue our support to provide you more innovative solutions for better usability and to provide better solutions.

Thank you for your co-operation and support.

Kind regards, Ganesh PSS – TCS AM Team +31-611530117

### Accolades @KLM

KLM was using IBM Websphere for deploying Java Enterprise Applications, The license cost was huge part of operating Websphere servers.

In my 10% personal development time, I did a study to find out what are the operational salient features that the Ops team is using and their benefits. From my research study, I came to a understanding that it can be replaced with Tomcat Server and few of the Ops Specific features can be extended in Tomcat using the pattern called Valves.

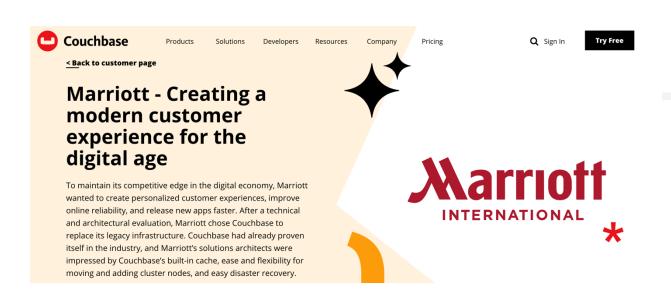
So I extented Tomcat with few custom valves implementing the missing features and showcased it to the Ops and Dev team that KLM doesn't need IBM Websphere and I proved that the similar set of features and performance can be achieved using tuned Tomcat. KLM saw this as eye opening breakthrough and migrated the apps to Tomcat and deprecated IBM Websphere

My work saved more than €120,000 annually in licensing and support costs

### Accolades @TCS

I was part of Technology Expert Group (TEG) in TCS and I was expert in NoSQL solutions.

I was assigned the task of evaluating NoSQL solution for the needs of Hotel Chain Marriott. I studied their requirement and did benchmark various NoSQL solution using a tool called YCSB and observed different parameters and metrics and I created a whitepaper on my evaluation. I suggested to go with Couchbase and aparently, they did.



4,000

transactions per second

30+

million documents

#### **Challenges**

- On a single central mainframe, an outage could cost millions in lost booking revenue
- Maintaining the reservation system and updating the mainframe was very costly
- Wanted to move to a cloud-forward strategy, use commodity hardware, and lower licensing costs
- Needed to deploy new applications faster and more reliably

#### **Outcomes**

- Data replicated to multiple geographic areas optimizes response times and improves availability
- A scalable, flexible cloud-based model reduces application development costs and improves speed
- Developers use SQL for JSON to deliver personalized customer experiences
- Couchbase supports 30 million documents, accessed at 4,000 transactions per second

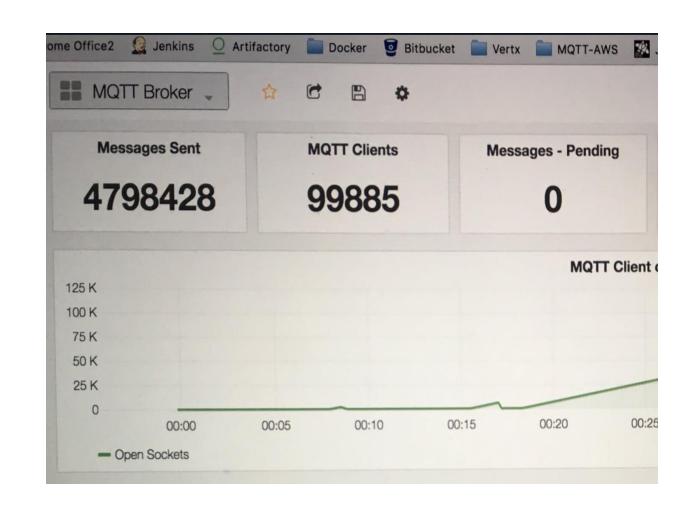
#### Innovation: Hackathons- IoT and Devices

- Parking lot solution
  - This was created in Hackathon conducted by Schiphol Airport Authorities
  - Demo
    - <a href="https://www.dropbox.com/s/38rtit362delnfc/video%2007-06-15%2013%2048%2002.mov?dl=0">https://www.dropbox.com/s/38rtit362delnfc/video%2007-06-15%2013%2048%2002.mov?dl=0</a>
- Smart Seat concept:
  - Demo
    - https://www.dropbox.com/s/v09vznz715gja4f/Hackathon%20819 x264.mp4?dl=0

#### Innovation: Created MQTT Broker

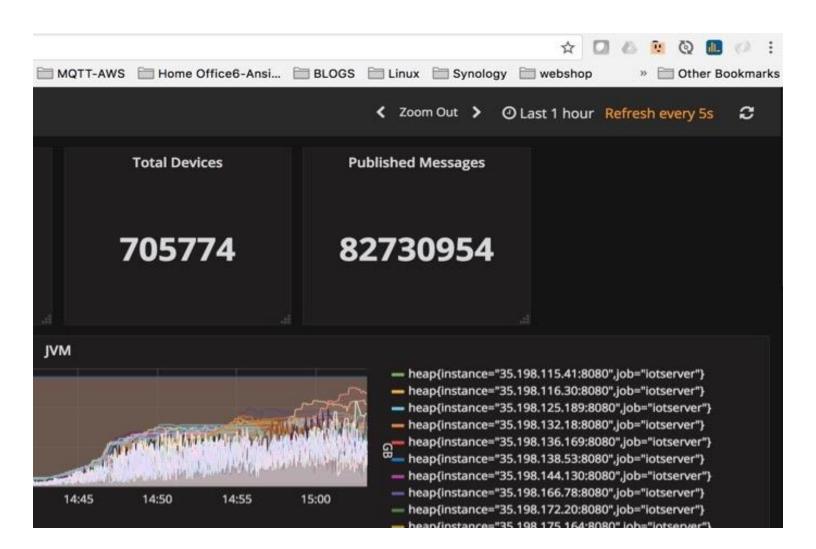
#### I Created MQTT broker as a personal project

- Read the MQTT spec and did the implementation
- Used VertX in the network layer, which is based on Netty
- Used AKKA in the middleware, which is based on Actor model
- embraced non-blocking async as the programming model
- Akka actor model enables high concurrent processing of messages
- Akka has inbuilt clustering which enabled the broker to be distributed
- Highly scalable to 1million concurrent client devices



### MQTT Broker – Highly scalable

705K client devices connected within 15 minutes 82 million messages are processed and saved in Time series database



## Skills

- Architecture/Systems/Protocols: Microservices, REST, Distributed systems, Docker, MQTT
- **Technology:** J2EE, Web Sockets, SSE, SOA SOAP Web Services, Micro services, REST, AWS (Amazon)
- **Frameworks:** Spring MVC, Spring Data, Spring Batch, Spring Integration, Spring HATEOS, Spring Boot, JPA/Hibernate, Hibernate Search, Thymeleaf template, Struts2
- Big Data(NoSQL): Cassandra, Spark, Kafka (Lambda Arch.), Zookeeper, Bookkeeper
- Metrics & Tracing: Codahale, InfluxDB, Grafana, Graylog, Zipkin (Brave)
- Toolkit\Systems: Akka Actors, Spring Cloud Netflix (Hystrix, Eureka, Curator), JHipster (AngularJS)
- Quality\Testing: SonarQube, PMD, Findbugs, Checkstyle, JUnit, SOAP UI, Postman, Cucumber
- **Performance Tuning:** JProfiler, JMC (Java Mission Control)
- Process: Agile Scrum methodology, JIRA, Confluence, Bamboo, Stash (GIT), Maven, Nexus, Gatling
- **Database:** PostgreSQL, Oracle
- **Utils:** Guava, Apache Commons, Jackson JSON, Jodadate, Dozer, MapStruct
- Cloud: AWS and GCP, Kubernetes

# Feedback – Jaco, Architect

From: Jaco Koster < jaco

Date: Friday, 29 September 2017 at 13:27

To: Suyambu Ganesh Thanga Nadar < suyambu.nadar Caubusana, Nikolas Ortlieb

Subject: Feedback Suyambu Ganesh

Hi Ganesh,

I was happy when you joined the team and that the cooperation with Shekh went so smoothly. Your input in the team has been a large contribution to the stability and success of the team. It was also great to talk with you about your aspirations in India. I will keep an eye on politics in India;-)

Regards,

Jaco

\_\_\_

Ganesh is an easy-going hardworking developer that consistently delivers functionality that works as it was designed. He has introduced a bunch of new technology and increased the performance, stability and maintainability of the applications he has worked on. Ganesh has been instrumental in the success of the API-team and i highly recommend him as lead developer on any project.

When incidents occur, he is not afraid to help out, investigate and solve issues. He has great ideas for the future of Quby and discusses these regularly with architects and the CTO. These ideas are always very well prepared and when asked, has thoughtful answers. He has expressed interest to further develop beyond the role of developer and i think he is ready for a next step.