

# SAI SATHVIK.S

(+91)9980891626 ♦ sathu.sathvik@gmail.com

## EDUCATION

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**National Institute of Technology Karnataka, Surathkal**

Bachelor's in Technology.

Department of Computer Science and Engineering

*August 2013 - May 2017*

CGPA: 8.04

**Board of Intermediate Education, Andhra Pradesh**

Higher Secondary Education.

*June 2011 - April 2013*

Overall Percentage: 97.9%

## WORK EXPERIENCE

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**Samsung R&D Institute, Bangalore**

*Senior Software Engineer*

*June' 17 - Present*

**RapidMoments** (Product Development)

- Designed and developed a pre-processor module in the camera pipeline.
- Aimed at catering to Emotion recognition, Face landmarks and Blur detection in raw images.
- Integrated the module with other detectors to develop an overall aesthetic image processor.

**Bokeh Predictor** (Algorithm Development)

- Implemented SVM Classifier to predict best Bokeh effect, post scene-analysis of Camera preview.
- Strengthened Image descriptors by adding additional features and improved accuracy by 3%.
- Increased diversity of data available through various Data Augmentation techniques.

**AREmoji** (Product Development)

- Implemented an entire Activity screen to edit and customize 3D Avatar of face generated.
- Migrated major parts of code-base from Android 8 (Oxygen OS) to Android 9(Pie OS).

**GIF PoC**

- Developed a working Proof of concept which was launched as feature in Samsung Galaxy S10.
- Implemented a multi-threaded framework to download GIFs, through REST API calls.% .
- Awarded Samsung Spot Award for quick upbringing of demonstrable application.

## PROJECTS & INTERNSHIPS

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**Device Power Management Tool**

*Samsung R&D Bangalore*

- Developed a tool to profile a mobile device's battery and enlist running processes.
- Quantified processes' effect on device performance and implemented a ranking algorithm.
- Application was promoted as an internal tool for developers for its ease-of-use.

## IoT Home Automation

Guide: Prof Vani.M, NITK

- Developed a prototype for Department automation utility, with communication enabled between devices through MQTT protocol.
- Enabled control of connected devices through Mobile and Web interfaces.
- Secured the communication by authorizing incoming requests using OAuth2.0 protocol.

## Smart Power Management System

Guide: Dr. Vishal Garg IIIT Hyderabad

- Developed an interface to track power consumption of electric devices connected to a smart strip.
- Performed real-time analytics on the information, and increased power savings by 12%.
- Incorporated an automatic shutdown facility to protect appliances from erratic voltages.

## Demonstration of cyber attack Clickbait

Guide: Dr. Mohit.P NITK

- Designed web content similar to Facebook login page to embed a clickbait.
- Click of Login button was captured to maliciously send user details to backend servers.
- The project was awarded the Best Course Project among 20 others.

## University Placement Website

NITK Surathkal

- Designed and developed website for students for placements in our University.
- Equipped the site with features like user registration, view eligibility, share interview experiences.
- Developed an independent portal for visiting companies to view students' profiles.

## TECHNICAL STRENGTHS

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Languages	Java, Python, C++, SQL, NoSQL, Javascript, JSON
Software & Tools	Android Studio, Visual Studio, ReactJS, MongoDB, AWS, GIT, Latex

## ACADEMIC ACHIEVEMENTS

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- Recipient of CSAB Scholarship for achieving 99.9 percentile rank in National level examination JEE Mains 2013.
- Awarded Best Outgoing Student in High School.

## EXTRA-CIRRICULAR

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- Co-Organized Incident 2017 - a National Cultural fest of NITK, Surathkal.
- Enacted in a Drama as part of "Bharat Darshan" 2014 an annual event of NITK.
- Certified as High altitude Trekker, by Indiahikes, for trekking Rupin Summit, India at 15,300 feet.