



# MOHITH BHARGAV SUNKARA

MASTER STUDENT AT BIELEFELD UNIVERSITY

## Experience

### ● Aug 2019 - Present 4ALLPORTAL Information Technology and Services

Software Developer, Gütersloh, Germany

- Build software components which increase the efficiency of the core application.
- Wireframe strategies for an efficient development environment.
- Solving production issues related to the core application.

## Education

### ● Oct 2017 - Present M.S. in Intelligent Systems Bielefeld University, Bielefeld, Germany

- Machine Learning - Reinforcement Learning - Deep Learning - Statistical Natural Language Processing - Social Robotics and Human Cognition

### ● Jun 2013 - Jun 2017 B.Tech. in Electronics and Instrumentation Engineering SRM University, Chennai, India

- Automation Engineering - Control systems - Electronic circuits and Digital System - Microprocessor and Micro-controller - Logic and Distributed Control Systems

## Projects

Present

### PERSONAL PORTFOLIO WEBSITE

#### Personal Project

- Developing personal portfolio website using ReactJs, gitpages and gitconnected API

Present

### GSHEET EDITOR

#### Personal Project

- A software tool to simply and work with data stored over google sheets.
- Developing core and desktop-based application.
- Integrating data visualization tools.

Oct 2019

### RELATION CLASSIFICATION VIA CONVOLUTIONAL DEEP NEURAL NETWORKS

#### Academic Project

- Data refactoring, pre-processing and building CNN using Tensorflow.
- Hyper-parameter tuning.

Feb 2019

### MODELLING SOCIAL EMBODIMENT IN SOCIAL ROBOTIC COMPANIONS: USING TAMAGOTCHI & NAO

#### Academic Project

- To understand the social aspects of a robot and human interactions.
- Developed a Tamagotchi graphical user interface and Tamagotchi architecture in the NAO robot.
- Performed a survey on human participants and collected data for further analysis.

## Contact

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🔗 <https://swagking0.github.io/Portfolio/>

in [linkedin.com/in/mohith-bhargav-sunkara-930796119](https://www.linkedin.com/in/mohith-bhargav-sunkara-930796119)

🌐 <https://github.com/swagking0>

## Skills

### Scripting Languages

C & C++

Python

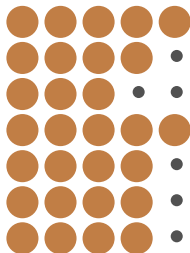
Java

Bash

HTML & CSS

JavaScript

Embedded C



### Databases

MySQL

Mongodb



### Frameworks & Softwares

ReactJs

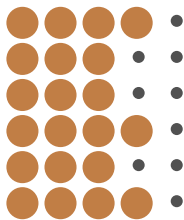
Flutter

NodeJs

Qt & PyQt

Docker

Git & GitLAB



## Interests

### Full stack development

♥ Wire-frame, build and deploy.

### AI research development

♥ Explore and collaborate to find "New".

### Gaming

♥ Strategy based, role play and story based.


Mar 2019	<b>MANIPULATION OF OBJECTS WITH ROBOTIC ARMS IN SIMULATED ENVIRONMENTS</b> <i>Academic Project</i> <ul style="list-style-type: none"> <li>- Worked with logic-geometric programming and Configuration space analysis.</li> <li>- Worked with incorporating physics in LGP.</li> <li>- Worked with multi-bound tree search-based solver.</li> </ul>
Jan 2019	<b>USING SPIKING NEURAL NETWORKS AS A SUDOKU SOLVER</b> <i>Academic Project</i> <ul style="list-style-type: none"> <li>- Implementation of winner takes all architecture using the spiking neurons to solve different sizes of sudokus.</li> <li>- Build a simple and flexible graphical user interface with both sudokus drawing features and solver steps analyzing features.</li> </ul>
Dec 2018	<b>INTEGRATION OF A MICROPHONE IN THE AMIRO PLATFORM, DATA ANALYSIS AND UTILIZATION OF THIS INFORMATION IN APPLICATIONS</b> <i>Academic Project</i> <ul style="list-style-type: none"> <li>- Implementation of a Software interface to retrieve data from the microphone.</li> <li>- Analysis of microphone data using signal processing methods.</li> <li>- Transformation of the processed audio data into an application using AMiRo platform.</li> </ul>
Sep 2018	<b>INTERACTION IN VIRTUAL REALITY</b> <i>Academic Project</i> <ul style="list-style-type: none"> <li>- Understand the problems using ray-casting in a complex environment. Wire-frame a solution. Implement the solution and test it with complex environments (Super Market).</li> </ul>
May 2017	<b>AN AUTOMATED SYSTEM AND PROCESS FOR CLEANING CONTAINERS</b> <i>Academic Project</i> <ul style="list-style-type: none"> <li>- Designed and developed a full-scale IoT based process control prototype to solve the problems in cleaning drinking water bottles at drinking water supplies industry.</li> </ul>

## Languages

- Telugu:** Native or bilingual proficiency
- English:** Professional working proficiency
- Hindi:** Professional working proficiency
- German:** Elementary proficiency

## Achievements

### Patent (Aug 2018)

-  Bachelor Thesis: "AN AUTOMATED SYSTEM AND PROCESS FOR CLEANING CONTAINERS". In: The Patent Office Journal No. 32/2018, pg.no. 29682.

## Publications

### Journal Article

#### INTERNATIONAL JOURNAL OF INNOVATIVE TECHNOLOGY AND EXPLORING ENGINEERING (IJITEE)

Balavivek Sivanantham, Mohith Bhargav Sunkara, Burugu Ravi Teja | Volume-9 Issue-4, Feb 2020 Pg: 575-582  
 "Modelling Social Embodiment in Social Robotic Companions: using Tamagotchi & NAO"