

SEBASTIAN THOMAS THEKKEKARA

MASTER GRADUATE - POWER ENGINEERING

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📍 Munich, Germany

in sebastn

🔗 sebastn



📁 EXPERIENCE

1. Antler Founders' Program

Apr 2021 - Jul 2021

- Headed the tech-development of 7 hobby projects, developed 1 hardware product prototype, deployed 3 websites, and 4 low code applications
- Led several brainstorming sessions & came up with innovative ideas as a team and analyzed the technical feasibilities of the ideas
- Attained an understanding of business models, marketing, branding, sales, user research and similar non technical aspects

2. Werkstudent at Kinexon GmbH

Nov 2018 - Mar 2021

- Headed the prototyping, development and testing of Sensorless Asset Tracking (SAT) product hardware
- Identified a critical short-coming of a sensor with respect to the customer requirement and helped the team to make a design change before going into mass production
- Performed periodical release tests with firmware and Robotics (AGV) teams and kept track of the feature additions and bugs
- Developed various Arduino based systems and prototypes for in-house testing

3. Embedded System and IoT Intern at Motius GmbH

Sep 2018 - Dec 2018

- Performed market research, competitor product analysis & prepared a feature list for 'Sonnenglas 3.0' Project and designed & developed the first version of the hardware
- Initiated and conducted an extensive research on sensor technologies as the only electrical engineer in the team and proposed the prospective sensors that could be used as per the requirements of Knorr Bremse

4. Research Assistant at TU Munich

a. Chair of Visual Computing Lab - Scan2Cad Project

Mar 2018 - Sep 2018

- Performed keypoint alignment of 3D object models to increase the accuracy & reliability of 3D object alignment

b. Chair of Geoinformatics - Geosensorweb and Internet of Things

Apr 2021 - Jul 2021

- Tutored & guided 3 students for the course and supervised them on the development of Seeeduino & Raspberry Pi based systems

📖 EDUCATION

Technical University Munich

TUM Skills Excellence Program

Master of Science in Power Engineering (MSPE)

Govt. Rajiv Gandhi Institute of Technology

B.Tech in Electrical and Electronics Engineering

- Ranked 6th out of 1493 students

💡 PROJECTS & HACKATHONS

1. Low Energy NOx Sensing Embedded System

Master Thesis, TUM

- Designed a PCB and developed a remote wake-up module for the sensor box

2. Smart Helmet for live 3D distance measurement

BE5 Hackdays, OpenCV AI Finals

- Developed a smart helmet that processed live stereo-depth camera input to calculate distance between points in 3 dimensions

3. Haptic Wristbands for indoor patient navigation

ER & D Hackathon

- Wristbands that vibrate & guide the patient according to the direction the patient should go
- Implemented Proof-of-Concept mock-up using Arduino and RFID Reader/Tag

4. RFID Based Real Time Indoor Tool Tracking System

Tech Challenge

- Based on RPi Gateway, Arduino and NodeMCU and Passive RFID
- Brought together a team of 4 students of various expertise & led the team over the semester

5. Advisor and Mentor

Delab Research

- Guiding and mentoring a young startup in India working on state-of-the-art technologies in IoT and machine learning
- Sharing my know-how of wireless technologies and the latest trends in IoT

📄 REFERENCES

Prof. Dr. Jia Chen

Chair of Environmental Sensing and Modeling, TUM

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Rafael Riester, Product Manager

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📍 Munich, Germany

Apr 2021 - Present

Oct 2017 - Mar 2021

📍 Kerala, India

2012 - 2016

8.82/10

🗂️ LANGUAGES

English IELTS 8.0 ● ● ● ● ●

German B2.2 ● ● ● ● ●

🔧 SKILLS

EMBEDDED SYSTEM

Raspberry Pi ● ● ● ● ●

Arduino ● ● ● ● ●

Soldering (SMD, THT) ● ● ● ● ●

Eagle ● ● ● ● ●

ESP32, ESP8266 ● ● ● ● ●

PROGRAMMING

C/C++ ● ● ● ● ●

Python ● ● ● ● ●

Node-RED ● ● ● ● ●

Git ● ● ● ● ●

Bash ● ● ● ● ●

MISCELLANEOUS

Linux ● ● ● ● ●

MS Office ● ● ● ● ●

GSuite ● ● ● ● ●

Adobe Illustrator ● ● ● ● ●

Adobe Indesign ● ● ● ● ●

Autodesk Inventor ● ● ● ● ●

♥ INTERESTS

IoT Linux

Prototyping Wireless Tech

Automation Coaching

🎮 HOBBIES

Football Design

Music Gaming