Sourab Bapu Sridhar

Master's Student at the Chalmers University of Technology

Master's student in System, Controls, and Mechatronics with experience in CNN, sensor filtering, and state estimation. Looking to apply my experience building a high-performance autonomous racecar at Chalmers Formula Student Driverless to develop holistic solutions using Deep Learning/CNN.

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EDUCATION

Master's in Systems, Controls and Mechatronics
Chalmers University of Technology

09/2019 – Present — *Göteborg, Sweden*

Courses

- Image Analysis
- Sensor fusion and nonlinear filtering
- Applied Signal Processing
- Model Predictive Control

Bachelor's in Electrical and Electronics Engineering
B N M Institute of Technology

07/2011 – 07/2015 — *Bengaluru, India*

Courses

- Signals and Systems
- Digital Signal Processing
- Embedded Systems
- Control Systems

WORK EXPERIENCE

Project Engineer
Chalmers Formula Student Driverless

09/2019 – Present — *Göteborg, Sweden*

Chalmers Formula Student Driverless is a student-driven project team building a high-performance autonomous racecar.

Tasks

- Design localization algorithms for vehicle state estimation
- Develop embedded system software for the low voltage system incorporating CI/CD framework
- Head a seven-member design team responsible for the overall vehicle concept and design decisions

Senior Software Engineer
Robert Bosch GmbH

07/2015 – 06/2019 — *Bengaluru, India*

Achievements

- Developed device drivers and created hardware and software tests for safety-critical redundant supply module in all Bosch electrical braking system products, ensuring series production of 5+ autonomous driving level 3 compatible active safety projects worldwide
- Collaborated with 60+ stakeholders across the world to build the first "Redundant Supply Concept" for all Bosch electrical braking system products in Germany, resulting in the development of two autonomous driving level 3 compatible active safety products from Bosch
- Optimized software variant handling for safety-critical supply module in all Bosch electrical braking system products, diminishing software maintenance effort by 50% for over 30+ projects worldwide

SKILLS

Convolutional neural network | C/C++ | Python | Matlab | Git | Docker | ASPICE | UML

PERSONAL PROJECTS

Simulation-based reinforcement learning for autonomous driving (02/2020 – Present)

- Train a reinforcement learning-based self-driving agent using an environment designed in the unity engine

VOLUNTEER EXPERIENCE

Education Volunteer
Robert Bosch GmbH

08/2015 – 06/2019

Achievements

- Mentored 100+ students from class VIII to class X on career development at Government High School, Dodabelle, India
- Taught English to 40+ kids in class VI at Paranga Vidhya Kendra, Thorepalya, India
- Secured employee participation in fundraising activities

HONOR AWARDS

Young Achiever Award (2016)
Robert Bosch GmbH

Best Outgoing Student (2015)
B N M Institute of Technology

LANGUAGES

English
Native or Bilingual Proficiency

German
Elementary Proficiency

REFERENCES

Ola Benderius
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