Education

University of Stuttgart Stuttgart, Germany

M.Sc. IN INFORMATION TECHNOLOGY - CURRENT GERMAN GPA: 1.4

2019 - 2021

Courses: Robotics, Optimization, Deep Reinforcement Learning [link]

Frankfurt University of Applied Science

Frankfurt am Main, Germany

B. Eng. in Electrical Engineering and Information Technology - German GPA: 1.5 - US GPA: 3.7/4.0

2015 - 2019

Thesis: "Approaches to solve kidnapped robot problem" - Grade: 1.0/1.0 [link]

Le Hong Phong High School for the gifted

Ho Chi Minh City, Vietnam

MAJORING IN APPLIED PHYSICS - GPA: 9.2/10

2012 - 2015

Experience.

Bosch Center for Artificial Intelligence

Renningen, Germany

RESEARCH INTERN

May 2020 - Present

- Research and implement robotics manipulation skill models with forces/torques reproduction based on Learning from Demonstration (LfD) and Reinforcement Learning (RL) paradigms.
- Successfully developed a proof of concept for the E-bike assembly task.
- Supervised by Dr. Meng Guo.

HLRS - High Performance Computing Center

Stuttgart, Germany

STUDENT RESEARCH ASSISTANT

November 2019 - April 2020

- Researched and implemented in C++ new parallel programming models.
- Implemented back-end functionalities in DASH project http://www.dash-project.org/
- Maintained and configure HPC systems in HLRS.

Frankfurt University of Applied Science

Frankfurt am Main, Germany

RESEARCH ASSISTANT

May 2019 - September 2019

- · Engaged in mobile robotics research (e.g state estimation, path planning) with Prof. Peter Nauth
- Designed and implemented novel Bayesian optimization models using Wifi signal and range sensor data for localization tasks in mobile robots, therefore enhanced the robustness of robot navigation up to 90% pose recovery rate
- Guided new student to operate robots in the Autonomous lab.

EyeQ Ltd. Ho Chi Minh city, Vietnam

ROBOTICS ENGINEER INTERN

March 2018 to August 2018

- · Collaborated and with the developer team to develop practical solutions for customers, using state-of-the-art Deep Learning models
- Developed a prototyped navigation platform that can apply in industrial warehouses

Intel Corporation Ho Chi Minh city, Vietnam

PRODUCT DEVELOPMENT ENGINEER INTERN

Jan 2017 to May 2017

- · Designed and implemented data analysis systems to process and analyze high volume unit test data in generated in manufacturing line
- Weekly validated and reported the quality of the Intel Thunderbolt Product manufacturing line
- Letter of Evaluation can be viewed in this link.

Open-source Projects

Ignition Physics tutorials and API documentation

Stuttgart, Germany September 2020 - now

GOOGLE SEASON OF DOC 2020

GOOGLE SEASON OF DOC 2019

- Create comprehensive tutorials on creating/using custom physics plugins for Ignition Physics to power simulation.
- Create coherent API documentation for Ignition Physics library.
- Project website: [link], Project proposal: [link].

RoboComp's basic components

Stuttgart, Germany

• Documented robotics components such as hardware drivers, cognitive processing components, etc.

·

September 2019 - November 2019

- Documented tutorial of combining these components in RoboComp ecosystem for specific robotics tasks.
- Project website: [link], Project proposal: [link].

DECEMBER 1, 2020 AN THAI LE · RÉSUMÉ

Flexible perception pipeline manipulation for RoboSherlock

GOOGLE SUMMER OF CODE 2018

- Implemented paralleled pipelines scheduler API.
- Implemented robotics module dependencies query interface.
- Improved performance of Robosherlock pipelines by paralleling pipeline processes.
- Project: [link]. Docs: [link], Certification: [link].

Multi-modal Cluttered Scene Analysis in Knowledge Intensive Scenarios

Institute of Artificial Intelligence, University of Bremen, Germany

Institute of Artificial Intelligence,

University of Bremen, Germany

May 2018 - August 2018

June 2017 - September 2018

GOOGLE SUMMER OF CODE 2017

- Implemented symmetry-based object segmentation algorithm in complex and cluttered scene.
- Implemented object segment API for grasping system.
- Project: [link]. Demo: [link] Documentation: [link]. Certification: [link].

Skills

- Language: Python 2 & 3, C++11 & 14, Java, UNIX
- · Libraries and Frameworks:
 - **Frameworks**: numpy, sklearn, scipy, pandas, Tensorflow 2, PyTorch.
 - Robotics: ROS, Gazebo, openAl Gym, Mujoco, KUKA, Panda arm.
 - Others: LTFX, Matlab

Honors & Awards_

SCHOLARSHIPS

- Deutschlandstipendium 2020 provides funding for study at the University of Stuttgart.
- DAAD Scholarship 2019 fully funds to conduct my Bachelor thesis at FH Frankfurt.
- **WUS Scholarship 2018** is financed by the Hessen Ministry of Economics, Energy, Transport and Regional Development (HMWEVL).
- AmCham Scholarship 2017, Best of the Bests Award: Top application score, top interview score.
- eSilicon Scholarship 2017 & 2018, Sunflower Mission Engineering & Technology Scholarship for Excellence

COMPETITIONS

Hackdays Rhein-Main Best solution Winner

Frankfurt am Main, Germany

HACKDAYS RHEIN-MAIN

May 2019

- Developed an app solution for dialysis patients to plan an optimal travelling round trip via cities, where dialysis treatments are possible.
- · Worked as Backend Developer to design optimized algorithms for trip planning and scheduling. Competition website: [link]

UNESCO Hackathon Vietnam Winner

Ho Chi Minh City, Vietnam

FOSSASIA AND UNESCO

October 2018

- · Developed the web application, Klima Kage to provide up-to-date climate and environmental data for journalists
- Project: [link].

Publications

GOOGLE SCHOLAR - CITATIONS: 14, H-INDEX: 2

ORCID ID: HTTPS://ORCID.ORG/0000-0003-0929-3316