Education

10/14 - 08/15

M.Sc. in Electrical Engineering and Information Technology,

10/16 - today TU München, Munich, Germany,

Expected Final GPA: 1.39 (on a scale from 1 to 5, with 1 being the highest score)

Master's Thesis

Topic: Development, theoretical verification, and evaluation of a new asymmetric bilinear model for representation learning of knowledge graphs. Supervised by: Dr. Till Brychcy & PD. Martin Kleinsteuber

02/15 - 07/17

Add-On Degree in Technology Management,

Center for Digital Technology and Management, Munich, Germany, GPA: 1.3 (on a scale from 1 to 5, with 1 being the highest score)

Trend research and ideation of business ideas, new product development and prototyping, consulting on a strategic endeavors. 25 students selected per semester (<8% acceptance rate).

10/10 - 11/13

B.Sc. in Electrical Engineering and Information Technology,

TU München, Munich, Germany,

GPA: 1.9 (on a scale from 1 to 5, with 1 being the highest score)

Bachelor's Thesis

Topic: Development of a combined event and RGBD image camera, calibration method, and data acquisition framework. Evaluation in a 3D SLAM application against ground-truth and state-of-the-art visual SLAM algorithms. Contribution to 2014 ICRA paper. Supervised by: Dr. David Weikersdorfer & Prof. Jorg Conradt

Work and Research Experience (selection)

11/17 - today

Master's Thesis Student, Mercateo GmbH, Munich, Germany

Research on representation learning of knowledge graphs.

03/17 - 08/17

Freelancer, Robotise, Munich, Germany

Consulting, perception algorithm development, managing code integration and continuous testing, managing ROS package release process.

01/16 - 08/16

Research Intern, NTT, Communication Science Laboratories, Atsugi, Japan

Research on human-curated cross-modal feature learning. Contribution to 2018 AAAI paper.

10/14 - 07/15

Research Assistant, NavVis, Munich, Germany

Development of algorithms for the removal of artifacts in point clouds.

01/14 - 06/14

Research Intern, Siemens AG, Siemens Corporate Research, Princeton, USA

Implementation of 3D reconstruction workflow (feature-based); Implementation and evaluation of depth camera calibration techniques; Porting and refactoring of C code to C++.

10/13 - 12/13

Research Assistant, TU München, Neuroscientific System Theory, Munich, Germany

Extension of an event-based SLAM framework to work in real-time on embedded, low-power ARM hardware (e.g., Rockchip devices), streaming of data via UDP, and visualization on a client device.

10/12 - 03/13,

Teaching Assistant for the C Programming Course, TU München, Munich, Germany

04/15 - 07/15

Tutoring of around 30-50 students in the programming language C.

09/11 - 11/11

Intern, Siemens AG, I DT MC MF-M COC LMS LP, Munich

Design and implementation of a test series evaluation tool in MATLAB (>20x speed improvement over existing solution); Implementation of a wrapper library for Siemens Starter in C# and integration with LabVIEW.

07/09 - 03/10

Private First Class (OR-3), *3. FüUstgBtl 293*, Murnau am Staffelsee, Germany Mandatory military service. Trained for SATCOM and TETRAPOL.

Publications

02/18 **Paper**, *NTT*

Mukura, Y.; Kimura, A.; Adrian, D.; Gharamani, Z., Weakly supervised collective feature learning from curated media, Conference on Artificial Intelligence (AAAI), 2018.

- Book, Center for Digital Technology and Management, CDTM The Future of Education, ISBN: 978-3-9815538-7-1, 2015.
- o6/14 Paper, Institute of Automatic Control Engineering, TU München
 Weikersdorfer, D.; Adrian, D.; Cremers, D.; Conradt, J., Event-based 3D SLAM with a depthaugmented dynamic vision sensor, IEEE International Conference on Robotics and Automation (ICRA),
 2014.
- Poster, Institute of Automatic Control Engineering, TU München
 Weikersdorfer, D.; Adrian, D.; Conradt, J., Event-based 3D SLAM. Bernstein Sparks Workshop on
 NeuroEngineering, Tutzing, 2013.

Competitions, Awards, and Scholarships

09/17 - 10/17 **1st Place in VW Data:Lab Deep Learning and Robotics Challenge**, Volkswagen AG, Munich

Team challenge entailed building a fully autonomous Lego brick sorting robot from scratch.

- o6/16 **Abroad Scholarship**, Heinrich und Lotte Mühlfenzl-Stiftung, Munich Awarded to students with excellents grades and social engagement at/outside of university.
- 08/15 09/16 **Vulcanus in Japan**, *EU-Japan Centre for Industrial Cooperation*, Japan Accepted as 2015-16 fellow (4% acceptance rate, >1000 applicants EU-wide).
- 11/12 − 11/13 Siemens-Mentoring-Program, Siemens AG / TU München, Munich

 The one-year program offers a Senior Manager as mentor, fireside chats, and a variety of events (~15 students per year).
- 2nd Place in 'AdvElsor' Competition, *TU München*, Munich
 Workshops on teamwork, time and project management, learning techniques, and presentation methods. Managed IT sub-team during the final project of building an Autonomous Rubik's-Cube-solving robot. Placed 2nd in the competition.

Voluntary activities

- 10/12 07/15 **Member**, Federal Agency for Technical Relief (THW), Munich
 - Technical relief in Germany as part of national civil protection measures.
- o₃/₁₂ ₁₁/₁₃ **Mentor**, *Mentoring for International eXchange Students*, TU München Mentor and contact person for incoming foreign students of the faculty.
- 01/12 01/13 **Member of the board**, Student association of the Department of Electrical Engineering and Information Technology, TU München

Management of the registered association. Organized a new soft-skill program available to all students as part of the regular degree curriculum. Conducted reform of the by-laws including the organizational structure of the board.

03/11 - 07/15 **Student representative**, Department of Electrical Engineering and Information Technology, TIJ Miinchen

Regular member of the Studienkommission (Commission on study affairs) and member of the working comitee of the master reform.

Computer Literacy and Open-Source Contributions

Operating Systems Linux (x86 64/ARM), Windows Office LaTeX, MS Office, OpenOffice

Programming C/C++, Python, MATLAB Libraries Tensorflow, Eigen, PCL, OpenCV, Languages ROS

GitHub github.com/dbadrian

Languages

German Native English Proficient (C2)

Japanese Lower Intermediate (A2-B1)