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 and evaluation of a new asymmetric bilinear model for representation learning of knowledge graphs.

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.

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

Roboticist 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 depth-augmented 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).
- 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).
- 10/10 07/11 **2nd Place in 'AdvElsor' Competition**, *TU München*, Munich Managed IT sub-team during the final project of building an Autonomous Rubik's-Cube-solving robot.

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.
- 03/12 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, TU München
 - 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)