Education

07/19 - today

Ph.D.,

Bosch Center for Artificial Intelligence & Institute of Neural Information Processing, Ulm University, Munich, Germany

10/14 - 08/15

M.Sc. in Electrical Engineering and Information Technology,

10/16 - 04/18

TU München, Munich, Germany,

GPA: 1.3 (on a scale from 1 to 5, with 1 being the highest score)

Master's Thesis

Title: "A Simple But Universal Factorization Model for Knowledge Graph Completion".

02/15 - 07/17

Honours 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)

Add-on study program, with a focus on trend research and ideation of business ideas, new product development and prototyping, and consulting on 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

Title: "Development of a Depth-Augmented Dynamic Vision Sensor for 3D SLAM". Coauthored 2014 ICRA paper.

Work and Research Experience (selection)

08/18 - 06/19

Software Engineer (part-time), NavVis GmbH, Munich, Germany

Implementation of surface reconstruction algorithms and evaluation framework. Conducting product research through customer and expert interviews.

11/17 - 04/18

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, Honatsugi, Japan

Research on human-curated cross-modal feature learning. Co-authored 2018 AAAI paper.

10/14 - 07/15

Research Assistant, NavVis GmbH, 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 graph-SLAM) with out-of-core bundle adjustment; 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

- [1] Yusuke Mukuta et al. "Weakly supervised collective feature learning from curated media". In: The Thirty-Second AAAI Conference on Artificial Intelligence (AAAI-18). 2018.
- Irman Abdic et al. The Future of Education: Trend Report 2015. Center for Digital Technology and [2] Management, 2015.
- [3] David Weikersdorfer et al. "Event-based 3D SLAM with a depth-augmented dynamic vision sensor". In: Robotics and Automation (ICRA), 2014 IEEE International Conference on. IEEE, 2014, pp. 359-364.

Competitions, Awards, and Scholarships

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

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

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 11/12 - 11/13 The one-year program offers a Senior Manager as mentor, fireside chats, and a variety of events (\sim 15 students per year).

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

Leadership activities

Member, Federal Agency for Technical Relief (THW), Munich 10/12 - 07/15

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.

Member of the board, Student association of the Department of Electrical Engineering and 01/12 - 01/13

Information Technology, TU München

Management of the registered association, including our business branch. Organized the introduction of a new soft-skill program available to all students as part of the regular degree curriculum.

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

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

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

 $\mathsf{Git}\mathsf{Hub}$ github.com/dbadrian

Languages

German English Proficient (C2)

Japanese Lower Intermediate (A2-B1)