David Adrian

Education

10/14 – 08/15
10/16 – today
M.Sc. in Electrical Engineering and Information Technology,
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,
04/15 – 07/15
Teaching Assistant for the C Programming Course, *TU München*, Munich, Germany
Supervisor of around 30 students learning 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, *TUM/Mercateo*
Adrian, D.; Brychy, T.; Kleinsteuber M., ???, International Conference on Information and Knowledge Management (CIKM), 2018 [SUBMITTED].

Augustenstraße 93 – 80798 München
+49 176 / 21 02 56 29 • *david.adrian@tum.de* • München, March 31, 2018

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.

10/15 **Book**, *Center for Digital Technology and Management*, CDTM
The Future of Education, ISBN: 978-3-9815538-7-1, 2015.

06/14 **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.

12/13 **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 the int. VW Data:Lab Deep Learning and Robotics Challenge**, *Volkswagen AG*, Munich
Team challenge entailed building a fully autonomous Lego brick sorting robot from scratch.

06/16 **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).

10/10 – 07/11 **2nd Place in 'AdvEIsor' 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.

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 Languages	C/C++, Python, MATLAB	Libraries	Tensorflow, Eigen, PCL, OpenCV, ROS
GitHub	github.com/dbadrian		

Languages

German	Native	English	Proficient (C2)
Japanese	Lower Intermediate (A2-B1)		

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