

# David Dao

PhD Student, ETH Zurich

Caesar-Ritz Strasse 511  
8046 Zurich  
✉ dwddao [at] gmail.com  
📱 LinkedIn

## Education

- 2017– **PhD Computer Science**, *ETH Zurich*, Zurich, Switzerland.  
Building AI Systems at DS3Lab  
Advisor: Ce Zhang
- 2014–2017 **MSc Computer Science**, *Technical University of Munich*, Munich, Germany.  
Graduated with Distinction
- 2015–2016 **MSc Computer Science, Visiting**, *Massachusetts Institute of Technology*, Cambridge, USA.  
Thesis at Broad Institute of MIT and Harvard
- 2010–2014 **BSc Computer Science**, *Karlsruhe Institute of Technology*, Karlsruhe, Germany.  
Minor in Quantum Physics

## Work experience

- Summer 2018 **Visiting Scholar**, *UC Berkeley*, Berkeley, CA, USA.  
Visiting Scholar at Berkeley AI Research (BAIR).  
Research on decentralized and privacy-preserving AI market places, supervised by Dawn Song.
- 2016–2017 **Autonomous Driving Researcher**, *Mercedes-Benz Research North America*, Sunnyvale, CA, USA.  
Co-founded Machine Learning scrum team within Autonomous Driving Department.  
Research on deep imitation learning for self-driving cars.
- 2015–2016 **Graduate Student Researcher**, *Broad Institute of MIT and Harvard*, Cambridge, MA, USA.  
Work on machine learning for high-dimensional image-based data during exchange at MIT.  
Published two journal papers.
- Summer 2014 **Google Summer of Code Intern**, *EMBL-EBI*, Cambridge, UK.  
Google Summer of Code Fellowship on interactive web visualisation for biological data.  
Published one journal article.
- Winter 2010 **Visiting Student**, *CERN*, Geneva, Switzerland.  
On-site high-school project, implemented computer simulations for high-energy particle physics at CERN.

## Publications

- Preprint **Dao, D.**, Alistarh D., Musat C., Zhang C., "DataBright: Towards a Global Exchange for Decentralized Data Ownership and Trusted Computation", *Arxiv* 2018
- Thesis **Dao, D.**, "Image-based chemical-genetic profiling using Deep Neural Networks", *Master thesis* 2017
- Journal Hennig H., Rees P., Blasi T., Kamensky L., Hung J., **Dao, D.**, Carpenter A. E., Filby A., "An open-source solution for advanced imaging flow cytometry data analysis using machine learning", *Methods* 2016
- Journal **Dao, D.**, Fraser, A. N., Hung, J., Singh, S., Carpenter, A. E., "CellProfiler Analyst: Interactive data exploration, analysis and classification of large biological datasets", *Bioinformatics* 2016
- Journal Yachdav, G., Goldberg, T., Wilzbach, S., **Dao, D.**, Shih I. *et al.*, "Anatomy of BioJS, an open source community for the life sciences", *eLife* 2015
- Book chapter **Dao, D.**, Flouri, T. and Stamatakis, A., "Automated Plausibility Analysis of Large Phylogenies" in in M. Elloumi, A.Y. Zomaya, editors *Pattern Recognition in Computational Molecular Biology*, Wiley, 2015

---

## Awards

- 2018 **Microsoft AI for Earth Award**, *Microsoft*.  
2017 **Grand Prize, Hack4Climate at United Nation's COP23**, *UNFCCC*.  
2017 **PyCon Speaker Germany**, *Python Software Foundation*.  
2016 **2nd Prize, Mercedes-Benz Silicon Valley Hackathon**, *Mercedes-Benz*.  
2015 **GPU Grant**, *NVIDIA*.  
2014 – 2017 **University Scholarship**, *Deutschlandstiftung Integration*.  
2014 **Google Summer of Code Fellowship**, *Google Inc.*  
2012 **Participant, Lindau Nobel Laureate Meeting**, *Joachim Herz Foundation*.  
2010 – 2014 **Dean's List**, *Karlsruhe Institute of Technology*.  
2010 – 2017 **University Scholarship**, *Hans Boeckler Foundation*.  
2006 – 2010 **Robert Bosch Scholarship**, *Robert Bosch Foundation*.

---

## Service and leadership

- Founder **Selfdriving AI**, Meetup series in Silicon Valley. Website: [selfdrivingai.org](http://selfdrivingai.org).  
Instructor **Bildung und Begabung**, Teaching an annual computer science course for high-school students since 2012.  
Co-Organizer **Harvard Coalition for Syrian Refugees**, Co-organized first-ever refugee conference at Harvard University. Website: [refugedu.github.io](http://refugedu.github.io).  
Co-Organizer **NextGen Broad Institute**, Served the graduate and postdoc community at Broad. Organized scientific workshops and events for career development.  
Founder, Organizer **Deep Learning Meetup Munich**, Organized meetups with leading experts in deep learning research with over 2000 attendees. Raised 80.000 \$ funding. Website: [meetup.com/munichacm](http://meetup.com/munichacm).  
Human rights **Amnesty International**, Active member since 2009. Served as a regional group leader from 2009 to 2013.

---

## Skills

- Languages **German (native), English (fluent), Cantonese (native), Nerd (native)**

---

## Independent coursework

- Independent studies MOOC Certificates in **Introduction to Artificial Intelligence** (2011), **Machine Learning** (2011), **Neural Networks and Machine Learning**(2012), **Programming a Robotic Car** (2012), **Quantum Computing** (2012), **Introduction to Biology** (2013), **Financial Markets** (2013), and **Statistical Learning** (2014). All completed with distinction

---

## References

### Prof. Dr. Ce Zhang

Systems Group, Department of Informatics  
ETH Zurich  
✉ [ce.zhang \[at\] inf.ethz.ch](mailto:ce.zhang@inf.ethz.ch)  
☎ +41 44 632 75 29

### Prof. Dr. Alexandros Stamatakis

Director, Scientific Computing Group  
Heidelberg Institute for Theoretical Studies  
✉ [alexandros.stamatakis \[at\] h-its.org](mailto:alexandros.stamatakis@h-its.org)  
☎ +49 (0)6221 533 240

### PhD Anne E. Carpenter

Director, Imaging Platform  
Broad Institute of MIT and Harvard  
✉ [anne \[at\] broad.mit.edu](mailto:anne@broad.mit.edu)  
☎ +01 (617) 714-7750

### Dr. Axel Gern

Vice-President, Autonomous Driving  
Mercedes-Benz Research North America  
✉ [axel.gern \[at\] daimler.com](mailto:axel.gern@daimler.com)