

# Jianxin Zhao

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## EDUCATION

### University of Cambridge, Cambridge, UK

- Ph.D. in Department of Computer Science and Technology Oct 2015 – Sep 2020
  - Thesis: Optimization of a modern numerical library, a bottom-up approach
  - Adviser: Prof. Jon Crowcroft
  - Focus: numerical computation

### Beijing Institute of Technology, Beijing, CN

- M.S. in Software Engineering Sep 2013 – Jul 2015

### Karlsruhe Institute of Technology, Karlsruhe, Germany

- Student Exchange Program Mar 2013 – Jun 2013

### Beijing Institute of Technology, Beijing, CN

- B.S. in Software Engineering Sep 2009 – Jul 2013

## OPEN SOURCE PROJECTS

### Owl - OCaml Scientific and Engineering Computing

2016 – Present

- Owl is a dedicated system for scientific and engineering computing. It is designed in the functional programming language OCaml. It is widely recognised and used in the OCaml community.
- Core Developer
- Project Homepage: <https://ocaml.xyz/>

## PUBLICATIONS

### CONFERENCES

- [0] J. Zhao, “Executing Owl Computation on GPU and TPU,” in *OCaml 2019*, Berlin, Germany, Aug 2019.
- [1] J. Zhao, T. Tiplea, R. Mortier, J. Crowcroft, and L. Wang, “Data Analytics Service Composition and Deployment on Edge Devices,” in *Big-DAMA workshop, SIGCOMM 2018*, Budapest, Hungary, Aug 2018.
- [2] J. Zhao, R. Mortier, J. Crowcroft, and L. Wang, “Privacy-preserving Machine Learning Based Personal Data Analytics System,” in *AAAI/ACM conference on Artificial Intelligence, Ethics, and Society 2018*, New Orleans, Louisiana, USA, Feb 2018.
- [3] J. Zhao, R. Mortier, J. Crowcroft, and L. Wang, “User-centric Composable Services for Personal Data Analytics (Poster),” in *Poster Session, Symposium on Operating Systems Principles 2017*, Shanghai, China, Nov 2017.
- [4] J. Zhao, “Towards Security in Distributed Home System,” in *Doctoral Workshop, EuroSys’17*, Belgrade, Serbia, Apr 2017.
- [5] J. Zhao, C. H. Liu, M. Chen, X. Liu, and K. K. Leung, “Energy-efficient dynamic event detection by participatory sensing,” in *2015 IEEE International Conference on Communications*, London, UK, Jun 2015.

## TALK

- “Executing Owl Computation on GPU and TPU” Aug 2019  
OCaml 2019, ICFP
- “Data Analytics Service Composition and Deployment on IoT Devices” Jun 2018  
MobiSys 2018 ACM Open IoT Day

## AWARDS & SCHOLARSHIPS

- Fully Funded China Scholarship Council (CSC) Scholarship 2015 – 2019  
For supporting PhD study.
- Excellent Graduate Student Award, Beijing Institute of Technology Dec 2014  
Awarded to the top graduate students in the academic year of 2013-2014.
- Excellent Student Scholarship, Beijing Institute of Technology 2009 – 2013  
Awarded to the top students in each semester. Awarded for seven consecutive semesters.

- SERVICES**
- Paper Review: Transaction of Network (ToN), IEEE Journal on Selected Areas in Communications (JSAC), The World Wide Web Conference (WWW), etc.
  - Undergrad Supervision: *Computer Networking*, Computer Lab, Michaelmas term 2016
- LANGUAGES**
- Chinese: Native language.
  - English: Fluent.
  - Japanese: Intermediate.
- SKILLS**
- Numerical Computing, Data Analysis, Machine Learning, Functional Programming, Computer Vision, System Architecture, Python, OCaml, MATLAB, C, Git, L<sup>A</sup>T<sub>E</sub>X, Vim
- VOLUNTEER ACTIVITIES**
- STIMULUS Programme**, Cambridge, UK Oct 2016 – Jun 2017
- Teaching Assist, Milton Road Primary School
- STIMULUS is a community service programme which gives Cambridge University students the opportunity to work with pupils in local schools, helping with Maths, Science, Computing or Technology lessons.
- INTERESTS**
- Kendo.

[CV compiled on 2020-08-12]