# Aijun Bai

Postdoc, EECS Department, UC Berkeley

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LinkedIn: https://www.linkedin.com/in/aijunbai

### Qualifications

Strong programming and software engineering compatibilities

Rich Artificial Intelligence, automated planning, machine learning and robotics experience

Excellent interpersonal, communicating, writing, analytical and research skills

Reliable, versatile, cooperative, good team member or independent worker

## Experience

University of California at Berkeley, EECS, Berkeley, CA, United States, 2015.4 - present

Postdoc Researcher

Working on metareasoning approach for real-time online planning

Supervised by Prof. Stuart Russell

Alibaba Inc., Taobao.com, Hangzhou, Zhejiang, China, 2014.12 - 2015.3

Algorithm Engineer

Working on semi-Markov process based user behaviour modelling

Supervised by Dr. Zhao Li

Carnegie Mellon University, CSD, Pittsburgh, PA, United States, 2013.12 - 2014.10

Visiting Research Scholar

Working on particle filtering based multi-object tracking for CoBot

Supervised by Prof. Manuela Veloso and Prof. Reid Simmons

University of Science and Technology of China, CSD, Hefei, Anhui, China, 2009.9 - 2014.11

Research Assistant

Working on RoboCup soccer and hierarchical planning for large Markov decision process

Supervised by Prof. Xiaoping Chen

#### Education

Ph.D., Computer Science, University of Science and Technology of China, 2009.9 - 2014.11

B.E, Computer Science, University of Science and Technology of China, 2005.9 - 2009.6

#### Honors and Awards

Ali Star of Alibaba Inc., 2013.

World Champion of Soccer Simulation 2D, RoboCup 2013, Eindhoven, The Netherlands, Jul 2013.

Best Paper Nominee of RoboCup 2012 International Symposium, Mexico City, Mexico, Jun 2012.

First Place of Soccer Simulation 2D Free Challenge, RoboCup 2012, Mexico City, Mexico, Jun 2012.

World Champion of Soccer Simulation 2D, RoboCup 2011, Istanbul, Turkey, Jul 2011.

World Champion of Soccer Simulation 2D, RoboCup 2009, Graz, Austria, Jun 2009.

## Scholarships

Post-doctoral Fellowship of UC Berkeley, 2014.

Early Researcher Support of ICAPS, 2014.

Travel Award of NIPS Foundation, 2013.

Glarun Scholarship of CETC-14, 2013.

Scholarship of China Scholarship Council (CSC), 2013.

Kwang-Hua Scholarship of USTC, 2012.

Aegon-Industrial Responsibility Scholarship of USTC, 2012.

Outstanding Student Scholarship of USTC, 2005, 2006, 2007, 2008.

#### Selected Publications

- [1] **Aijun Bai**, Feng Wu, and Xiaoping Chen. Online planning for large markov decision processes with hierarchical decomposition. *ACM Trans. Intell. Syst. Technol.*, 6(4):45:1–45:28, July 2015.
- [2] **Aijun Bai**, Feng Wu, Zongzhang Zhang, and Xiaoping Chen. Thompson sampling based Monte-Carlo planning in POMDPs. In *Proceedings of the 24th International Conference on Automated Planning and Scheduling (ICAPS 2014)*, Portsmouth, United States, 2014.
- [3] **Aijun Bai**, Reid Simmons, Manuela Veloso, and Xiaoping Chen. Intention-aware multi-human tracking for human-robot interaction via particle filtering over sets. In 2014 AAAI Fall Symposium Series, 2014.
- [4] **Aijun Bai**, Feng Wu, and Xiaoping Chen. Towards a principled solution to simulated robot soccer. In *RoboCup-2012: Robot Soccer World Cup XVI*, volume 7500 of *Lecture Notes in Artificial Intelligence*. Springer Verlag, Berlin, 2013.
- [5] **Aijun Bai**, Feng Wu, and Xiaoping Chen. Bayesian mixture modelling and inference based Thompson sampling in Monte-Carlo tree search. In *Advances in Neural Information Processing Systems* 26 (NIPS 2013), pages 1646–1654. 2013.
- [6] **Aijun Bai**, Feng Wu, and Xiaoping Chen. Online planning for large MDPs with MAXQ decomposition. In *Proc. of the Autonomous Robots and Multirobot Systems workshop (at AAMAS 2012)*, Jun 2012.
- [7] **Aijun Bai**, Xiaoping Chen, Patrick MacAlpine, Daniel Urieli, Samuel Barrett, and Peter Stone. Wright Eagle and UT Austin Villa: RoboCup 2011 simulation league champions. In *RoboCup-2011: Robot Soccer World Cup XV*, volume 7416 of *Lecture Notes in Artificial Intelligence*. Springer Verlag, Berlin, 2012.

#### **Technical Skills**

Proficiency in C/C++, Python, BASH and LATEX coding languages

Rich Qt, Boost, ODPS, SQL, ROS, OpenRAVE, Eigen and NumPy experience

Experienced Linux/UNIX administration and programming skills

Familiar with agent, database, web, cloud computing and robotics development

#### References

Additional references available upon request.