

# Chen Zhenghao

[zhenghao@z-chen.net](mailto:zhenghao@z-chen.net) | [www.z-chen.net](http://www.z-chen.net)

## Education

Stanford University (Stanford, CA)

09/09 - 06/13

- M.S. Computer Science (Artificial Intelligence and Biocomputation) (GPA 4.13/4)
- B.S. Computer Science, with distinction and departmental honors and minor in Mathematics (Overall GPA: 4.04/4, Major GPA: 4.10 / 4)

### Awards

- Frederick E Terman Engineering Award (top 5% of Stanford Engineering seniors)
- President's Award for Academic Excellence in the Freshman Year (top 3% in Stanford class)

GRE: Quantitative: 800/800, Verbal 730/800, Writing 5.5

Relevant Coursework: Machine Learning and Statistical Learning Theory, Probabilistic Graphical Models, Statistics, Convex Optimization, Computational Biology

## Work Experience

Coursera Inc. (USA) – Software Engineer/Data Scientist

09/12 – Present

- Founding member of the analytics team and helped grow team of 20 data scientists/engineers
- Built key data infrastructure including A/B testing platform and content recommendation system and data products like content discovery experience.
- Initiated and supported internal research efforts to improve learning experience.

Counsyl (USA) – Intern

06/12 – 09/12

- Improved error correction and detection in Fragile X screening algorithm.

Stanford AI Lab, DAGS Research Group (USA) – Research Intern

04/11 – 08/11

- Worked on applications of probabilistic modelling to computational cancer biology and biomedical imaging under Prof. Daphne Koller.
- Developed a method for large scale analysis of images of brain tumors.
- Identified new subtypes of brain cancer with different survival and treatment characteristics.

Stanford AI Lab (USA) – Research Intern

06/10 – 12/11

- Worked on unsupervised feature learning using deep neural networks for image recognition and speech audio under Prof. Andrew Ng.

MIT CS AI Lab (USA) – Research Intern

07/05 – 08/05

- Worked on social network analysis of data involving physical interaction while preserving individual anonymity under Prof. Larry Rudolph.

## Publications and Talks

**Who's Benefiting from MOOCs and Why?**, [Z Chen](#), B Alcorn, G Christensen, N Eriksson, D Koller, EJ Emanuel. Harvard Business Review September 2015.

**What Matters, What Doesn't? A Coursera-Wide Look at Course Metrics**, N Eriksson, A Parisi-Amon, [Z Chen](#). Talk at 2015 Coursera Partners Conference, Irvine, CA.

**Dissecting an Online Intervention for Cancer Survivors**, [Z Chen](#), PW Koh, P Ritter, K Lorig, E Bantum, S Saria. Health Educ. Behavior. 2014.

**Retention and Intention in Massive Open Online Courses**, D Koller, A Ng, CB Do, [Z Chen](#). Educause Review June 2013.

**Self-Driven Mastery in Massive Open Online Courses**, CB Do, [Z Chen](#), R Brandman, D Koller. MOOCs Forum September 2013.

**Automated Population-scale Screening for Fragile X: Validation and Experience on 76,421 Samples**, SA Patterson, MR Theilmann, [Z Chen](#), IS Haque. Poster at AMP 2013

**Tuned Models of Peer Assessments in MOOCs**, C Piech, J Huang, [Z Chen](#), CB Do, A Ng, D Koller. EDM 2013

**A Graph Regularization Based Approach for Gene Scoring**, [Z Chen](#), D Koller. Stanford CS Honors Thesis 2012.

**Sparse Filtering**, J Ngiam, PW Koh, [Z Chen](#), S Bhaskar, A Ng. NIPS 2011. Spotlight paper.

**Learning Deep Energy Models**, J Ngiam, [Z Chen](#), PW Koh, A Ng. ICML 2011.

**On Random Weights and Unsupervised Feature Learning**, A Saxe, PW Koh, [Z Chen](#), M Bhand, B Suresh, A Ng. ICML 2011.

**Tiled Convolutional Neural Networks**, QV Le, J Ngiam, [Z Chen](#), D Chia, PW Koh, A Ng. NIPS 2010.

**Lower Bound on the Time Complexity of Local Adiabatic Evolution**, [Z Chen](#), PW Koh, Z Yan. Phys. Rev. A 74, 2006.

## Technical Skills

Languages: English, Mandarin (Native speaker of both, fluent writer and speaker)

Familiar with \*nix environment and operating on AWS cloud

Programming languages: Fluent in Python, R, Javascript. Familiar with Matlab, Java, C, Scala

Additional skills: Implementing machine learning algorithms in production, MapReduce frameworks, relational databases and SQL

## Other Activities

EcoTraining (South Africa) – Field Guide 04/09 – 05/09  
Trained to be an safari field guide in the Karongwe Reserve in South Africa.

Informatics.RI (Singapore) – Co-founder 11/08 – 12/08  
Planned and taught 14 one-day workshops introducing artificial intelligence, cryptography, programming and networking to over 100+ high/middle school students

Singapore Armed Forces – Operations Officer, 8th Signal Battalion 01/07 – 11/08  
Awarded the Sword of Honor (top overall officer cadet in graduating class). Took part in the planning and execution of security operations for major international events in Singapore. Responsible for the administrative and training coordination for a Signal Battalion.