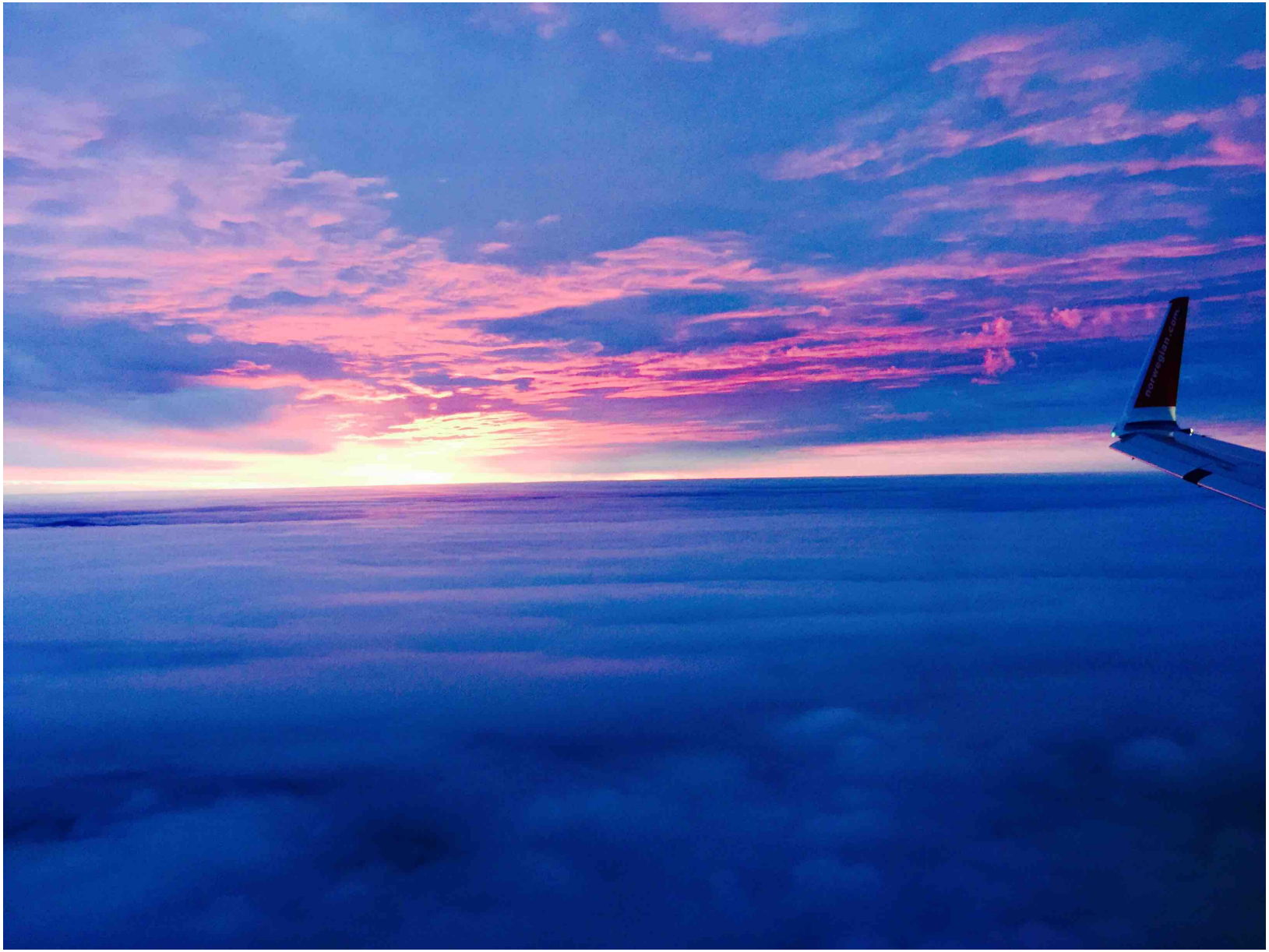

norwegian.com

Aalto University
School of Science
and Technology

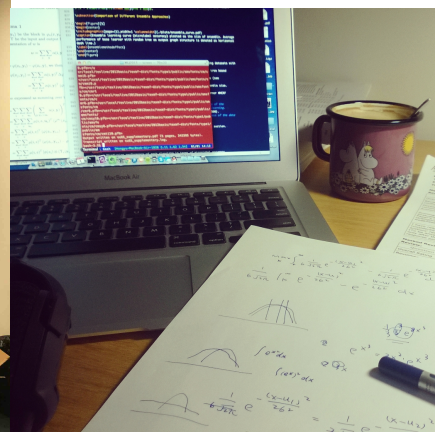
About me

Hongyu Su

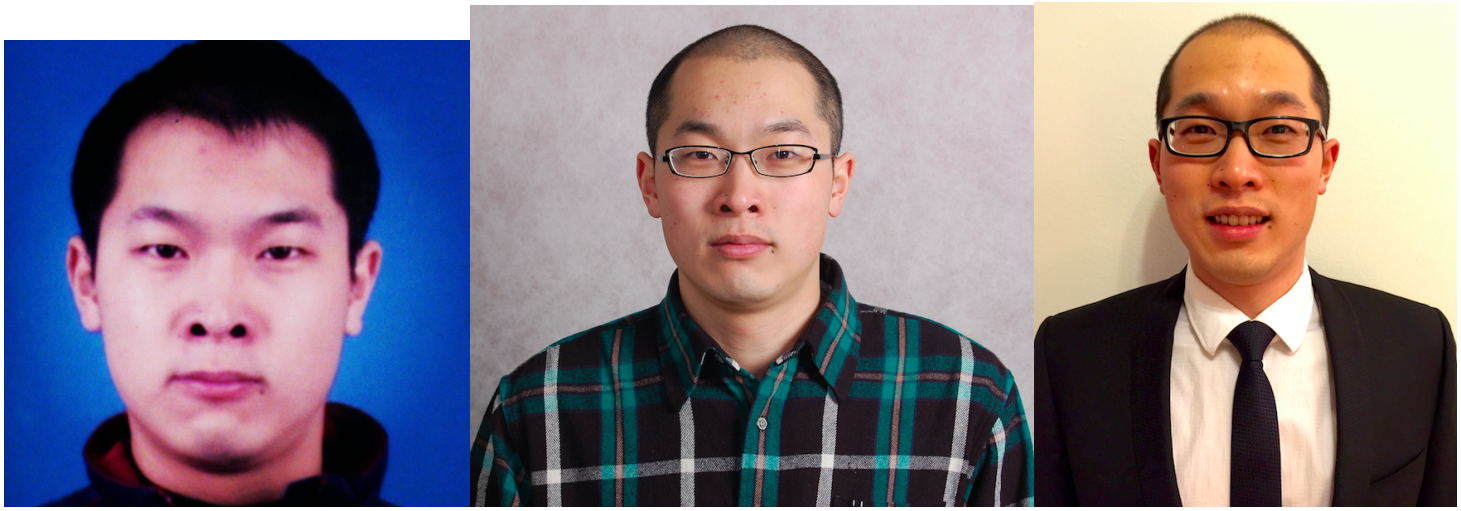
Helsinki Institute for Information Technology HIIT
Department of Computer Science
Aalto University

December 1, 2015

- Hongyu Su
- Born 1984 (integrity, hard-work, open, creative)
- I am a postdoc in Helsinki Institute for Information Technology and Aalto University since 2015.5.
- Research: build advance machine learning models to solve large scale data analysis problem (research project).
- Equivalent to: continuously learning, thinking, implementing, reporting.



Educations



- Bachelor in Computer Science and Engineering, Xidian University, 2007
- Master in Bioinformatics, University of Helsinki, 2010
- Phd in Information and Computer Science, Aalto University, 2015
- *'Everything comes with a price. Everything. Some things just cost more than others.'* -Brom
- Some things don't have a price tag!

Phd, 2011.01-2015.04, Helsinki, Finland

- The topic is **machine learning and optimization research on structured data**.
- Machine learning is to estimate outcomes (unknown) from data (known).
- **Ask non-trivial machine learning questions and provide solutions.**
  - Computer vision, identify object in the image.

$$(\underbrace{+1}_{\text{boat}}, \underbrace{+1}_{\text{sea}}, \underbrace{-1}_{\text{sun}}, \underbrace{-1}_{\text{beach}}, \underbrace{-1}_{\text{people}}, \underbrace{+1}_{\text{ice}}, \underbrace{+1}_{\text{land}})$$

  - News articles can be assigned to multiple categories.

$$(\underbrace{+1}_{\text{news}}, \underbrace{+1}_{\text{economics}}, \underbrace{-1}_{\text{sports}}, \underbrace{-1}_{\text{politics}}, \underbrace{-1}_{\text{movie}}, \underbrace{-1}_{\text{science}}, \underbrace{-1}_{\text{art}})$$

Results

Methods and technologies that are published in **TOP** machine learning journal and conference.

Dissertation

- My dissertation **Multilabel classification through structured output learning - methods and applications**.
  - **Advanced** machine learning methods to push the boundary of multilabel classification.
  - Solving many real-world **nontrivial** machine learning problems: document classification, image annotations, molecular classification, bioinformatics, social network analysis.

Work hard for 4 years and then

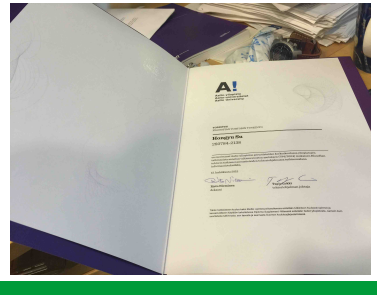
- Defense



- Karonkka



- Phd



Awards (name vs money)

- Chinese government awards for outstanding Phd candidate

- Some awards from Aalto university.

What did I learn from Phd?

- Strong expertise in
  - Machine learning and mathematical modelings
  - Optimization research: linear/nonlinear optimizations
  - Algorithm and data analysis / recommender system
  - Large scale data analysis
- Solid programming skills in
  - Python, Matlab, C
  - Hadoop, Spark, SQL
  - SVN, Git, Jekyll, JavaScript
  - Website and blog at **www.hongyusu.com**
  - GitHub at **www.github.com/hongyusu**
- A creative brain to solve challenging problems with modern technologies.
- An open mind that always wants to learn.
- **Be able to work hard for the long-term goal**.

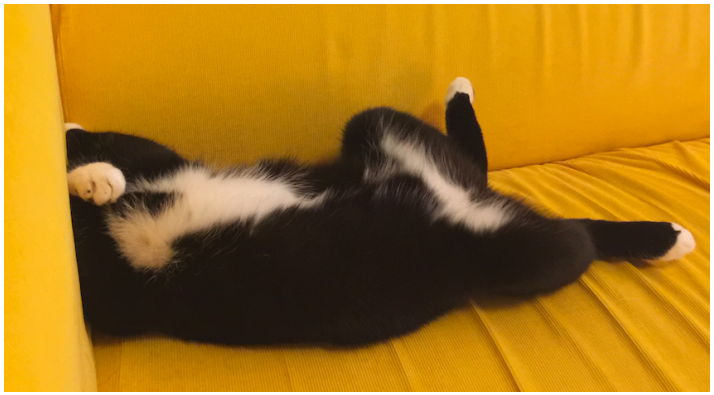
A big fan of sports

- I enjoy competitions and aggressive sport for example basketball.

- Now I try to discover unknown part of myself
  - Downhill snowboarding.
  - Bouldering (license)
  - Paragliding
  - Open water diving (license)
- A lot of gyms.

A cat person

- Pabulo

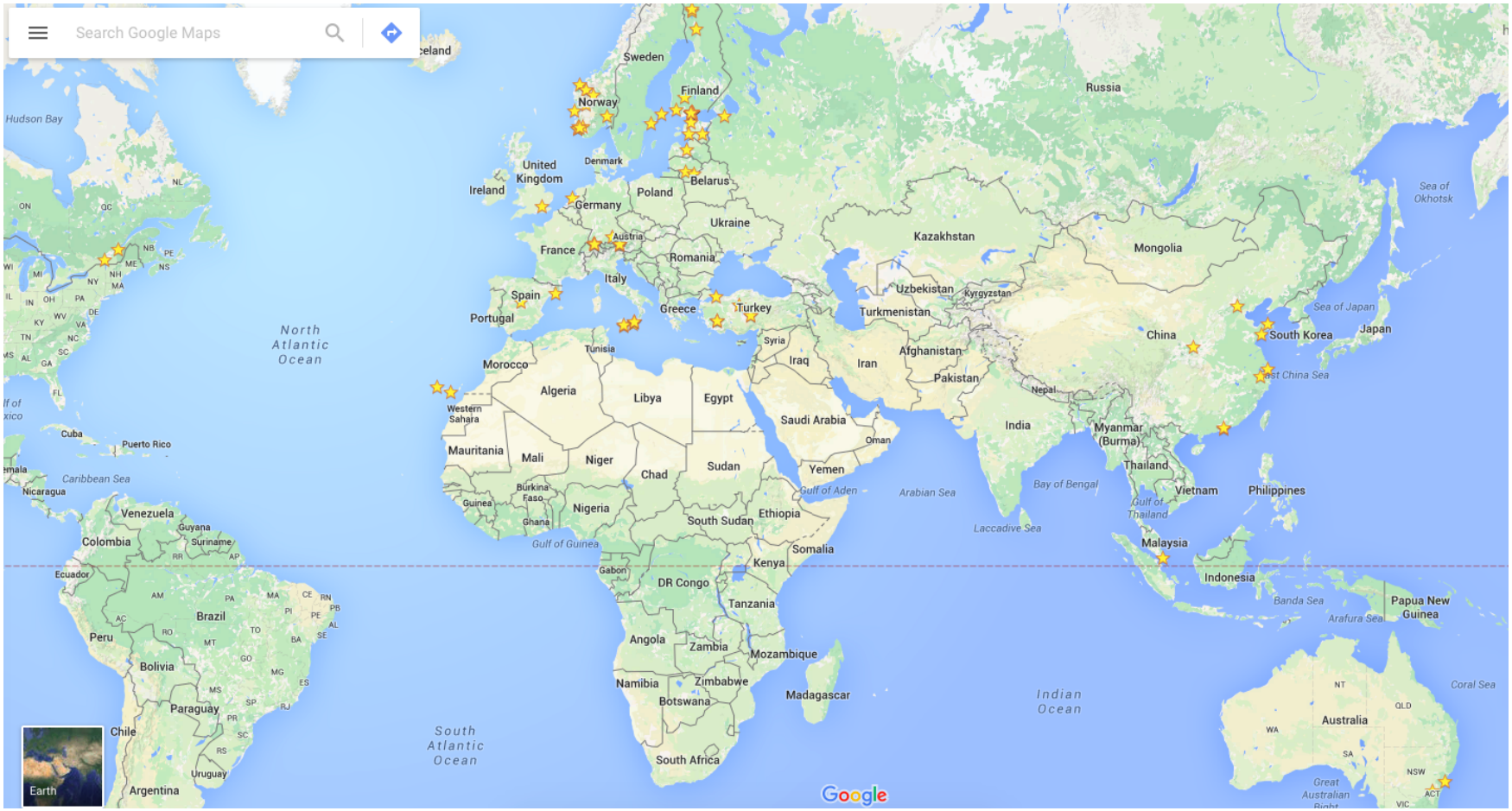


- Miu

- Cats are independent and make my life not very technical.

A hiker

I like to discover new places.



A photographer with a Flickr account

I like to memorize great moments.

A bottle collector

I like to taste new things.

'Stay hungry, stay foolish.' - Steve Jobs