

# Yumeng HOU

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## Profile Summary

- Master of Computer Science, graduated from EPFL with 73 credits (out of 92) scored 5.5 above.
- Research experience in data visualization and massive analysis. Published in IEEE VAST, CG&A, VIS and PacificVis.
- Professional experience as Product Manager in the cloud computing industry and Digital Analyst in the FMCG industry. Intensive practical knowledge on project management, massive computing, agile development and BI solutions.
- CHIC (Chinese Hardware Innovation Camp) alumni who co-designed and developed a connected smart lunchbox.
- Research interests: data visualization, social computing, sentiment analysis, network mining and HCI.

## Education

**Master of Science in Computer Science, EPFL (GPA: 5.39/6)** 2015 - 2017

- **Dissertation:** Visualizing Personal Nutrition Intake and Emotions [[abstract](#)]
- Participated in CHIC and carried out Hibachi, the innovative IoT project in a multicultural team. [[website](#)]

**Bachelor of Engineering in Digital Media Technology, Zhejiang University (GPA: 3.8/4)** 2010 - 2014

- **Dissertation:** Visualizing Topic Evolutions in Wikipedia (*poster in PacificVis 2014*)
- President of the College Student Union. Organized and coordinated various student events and activities.

**Exchange Study at Dept. of Computer and Systems Sciences, Stockholm University (GPA: A)** 2013 - 2014

## Professional Experience

**Product Manager, Alibaba Cloud, Hangzhou, China** 2017 - 2019

- Design and manage the RTC/WebRTC cloud services. Manage the R&D project using scrum (agile) with 30+ experts.
- Manage the CDN-based live streaming cloud services and the media analytics tools.
- Carry out business analysis and industry research reports on monthly basis.

**Digital Consumer Analyst Intern, Procter & Gamble, Geneva** 2016 - 2017

- Designed and implemented an automated workflow to visually report critical business KPIs.
- Finalized and documented a CRM algorithm prototype to enhance the ROI of automated email campaigns.
- Trained relevant organizations on my solutions, algorithms and insights. Organized team building activities.

**Research Assistant, the State Key Lab of CAD&CG, Zhejiang University** 2013 - 2015

- Assisted in research activities related to massive data visualization, visual analysis and ontology network mining.

**Teaching Assistant, Zhejiang University** 2013 - 2014

- Courses include: Information Visualization, Multimedia Data Visualization, Digital Innovation.

## Publications

- DimScanner: A Relation-based Visual Exploration Approach Towards Data Dimension Inspection, *IEEE VAST* [[access](#)]
- Visualizing Rank Time Series of Wikipedia Top Viewed Pages, *IEEE CG&A, IEEE VIS 2016 Fast Forwards* [[access](#)]
- Visualizing Topic Evolutions in Wikipedia, *PacificVis 2014 Poster*
- A Visual Analysis System for Event Detection from Network Log Data, *IEEE VAST Challenge 2013 Entry* [[access](#)]
- Invention: An analysis method of multidimensional data (No. 15840696, 201707) [[link](#)]

## Projects

### Hibachi – the First Elegant Connected Self-heating Lunchbox

- Designed, iterated and validated Hibachi from ideation into a market-ready functional prototype. [[website](#)]
- Designed and developed the mobile APP which controls and communicates with the lunchbox. [[report](#)]

### Web-based Interactive Visualization of MOOC Clickstream Data

- Processed and clustered the clickstream data into Markov representation of different learning patterns.
- Implemented the storytelling visualization to illustrate relationship between gradings and learning patterns. [[report](#)]

### SPARK - Your Personal Stress Management Coach

- An interactive stress management APP that motivates self-relieving journey using scientific approaches. [[demo](#)]/[[video](#)]

### <Natural Origins of The Internet> – Artistic Storytelling with Data Visualization, Installation Art

- Computed data visualization of the infrastructure networks along human history, presented them on ten carved glasses with tailored audio-visual effects. This work aims to inspire the viewers to reflect on the evolution of the Internet.
- Permanent collection of *The Museum of Inspiration*, located in Hangzhou. [[demo](#)]

### Aqua – A Virtual Aquarium Motivating Knowledge Sharing in Médecins Sans Frontières (MSF)

- Designed and prototyped Aqua, a virtual aquarium to motivate knowledge sharing activates in MSF. [[report](#)]/[[board](#)]

## Skills

**Programming**    Java, JavaScript, R, C++, MySQL, Python, processing, D3.js, three.js, p5.js, HTML/CSS, MATLAB etc.

**Techniques**     Data Visualization & Analytics, Prototyping, Industrial Modeling, Machine Learning, Agile Development, Axure, InVision, Unity, Rhino, MAYA, Audition, AI, PS, Knime, Spotfire, MS Office

**Language**        Chinese Mandarin (Native), English (Professional), French (Intermediate), Cantonese (Elementary)

**Hobbies**          Photography, Piano, Jazz Drums, Music Arrangement, Archery, Skiing, Table Tennis, Cycling, Longboard

## Honors and Awards

- 1<sup>st</sup> Prize of State Collegiate Advanced Mathematics (Calculus) Contest
- Outstanding Graduation Thesis Awards, Zhejiang University
- Palme Scholarship for Outstanding Exchange Students, Stockholm University
- Outstanding Student Awards, Zhejiang University
- Excellent Social Work Scholarship, Zhejiang University
- Outstanding Student Leader Awards, Zhejiang University