

# Yumeng HOU

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## Candidate Profile

- 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 industry and Digital Analyst in the FMCG industry. Intensive practical knowledge on project management, massive computing solutions and BI.
- CHIC (Chinese Hardware Innovation Camp) alumni who co-designed and developed a connected self-heating lunchbox.
- Research interests: data visualization, social computing, behavior modeling, 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 [[full-text](#)]
- Participated in CHIC and carried out the innovative IoT project Hibachi with 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 collaborating with 30+ experts.
- Manage the CDN+ live streaming cloud media services and analytical tools.
- Carry out business analytics 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 approaches, 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*
- 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 Hibachi. [[report](#)]

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

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

### SPARK - Your Personal Stress Management Coach

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

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

- Computed data visualization of different infrastructure networks along the human history, presented them on carved glasses and tailored sound effect. The work aims to inspire the viewers to visualize the natural origins 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](#)]/[[Github](#)]

## 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, Algorithms, 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