

Yumeng HOU

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Profile Summary

- Master of Computer Science, graduated from EPFL with 73 credits 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 [[full-text](#)]
- 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 collaborating 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 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

- 1st 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