

Haocheng Wu

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WORK EXPERIENCE

Senior Software Engineer, Huami Co., Ltd., Beijing

Aug. 2014 – Present

- Inaugural employee of Huami, one of the top three wearable data services worldwide
 - Contributed to the growth of company from 1 to 150-strong employees, after multi-designated work in the early phases of Huami's corporate life
- Algorithms Development Team Leader
 - Led 8 team members in algorithms development (project planning, assigning, monitoring and reporting) for company's key wearable products.
 - Coordinated with supply chain team, hardware team, project managers and APP developers, for hardware selection, power consumption tests, progress and risk monitors, interface docking, and other project processes
 - Work output:
 - 9 core algorithms embedded into chips and APPs
 - Float and fixed point versions of algorithm frameworks for all future wearable devices development
 - 12 pending patent applications, and 6 of them are applying US patents.
- Key Contributor to Sales totaling 22,000,000 Products
 - **Xiaomi Band 2 / Xiaomi Band 1 / Xiaomi Watch:** led 8 team members in creating algorithms for the 3 wearable devices; independently established algorithms frameworks on different chips; and independently implemented algorithms based on accelerometers and GPS sensors (i.e. pedometer, wrist rotation detection, sedentary reminder, cycling detection, rope skipping detection, sit-ups detection, tap detection and GPS track optimization).
 - **Li-Ning Running Shoes:** led 2 team members in building firmware for the smart chips embedded into the running shoes; and independently wrote algorithms for pedometer mechanism, and static power saving based on accelerometer
 - **Xiaomi Band APP Algorithms Platform:** led 2 team members in setting up the data collection and algorithms test platforms for Android and iOS
 - **Xiaomi Band APP Running SDK:** led 2 team members in building running modules with GPS on APPs.

Joint Training - Ph.D. & Internship Programme, Microsoft Research Asia(MSRA), Beijing

Aug. 2010 – Jul. 2014

- Proficient in typical data mining and NLP technologies, such as learning to rank, dependency parser, part-of-speech tagger.
- Product Contributions
 - **AI Bot "Xiaobing" for Microsoft**
Participated in product framework and development for product with over 1 million users; independently wrote algorithms for producing high quality question and answer pairs
 - **Web Dictionary for Microsoft Bing (Chinese version)**
Independently wrote algorithms to filter low quality question and answer pairs
 - **Social Search for Microsoft Bing (English version)**
Independently wrote algorithms for mining interesting question and answer pairs
 - **Document Understanding Module for Microsoft Bing (English version)**
Independently wrote algorithms for dependency parser and Part-of-Speech Tagger

EDUCATION

Ph.D. in Computer Science,

University of Science and Technology of China (USTC)
(Major in Information Retrieval and Natural Language Processing)

Expected Jun. 2017

B.S. in Computer Science,

University of Science and Technology of China(USTC)
GPA: 3.82/4.3. Rank 3rd in Graduating Class (121 students)

Jun. 2010

SKILLS

Programming

- C / C# / Java / C++

Languages

- Mandarin (Native Speaker); Fluent in English

SCHOLARSHIPS AND AWARDS

Scholarships

- Huawei Scholarship for Graduate Students (Top 1% of 170 students, 2015)
- USTC Outstanding New Graduate Student Scholarship (Top 1% of 170 students, 2010)
- National Endeavor Fellowship (Top 3% 121 students, 2009)
- Chery Automobile Easter Scholarship (Top 3% 121 students, 2008)
- USTC Zongzhi Zhang Scholarship (Top 5% of 121 students, 2007)
- USTC Outstanding New Undergraduate Student Scholarship (Top 10% of 121 students, 2006)

Awards

- Star of Tomorrow Honor for Outstanding Intern in MSRA (Top 10% of interns, 2010)
- Honorable Mention, COMAP's Mathematical Contest in Modeling (MCM) (Top 10% of contestants, 2009)
- First Prize, China National Contemporary Undergraduate Mathematical Contest in Modeling (CUMCM) (Top 4% of contestants, 2008)

PUBLICATIONS

A New Approach to Query Segmentation for Relevance Ranking in Web Search

IRJ 2015

In *Information Retrieval Journal*, 18: 26-50, 2015;

Authors: **Haocheng Wu**, Yunhua Hu, Hang Li, Enhong Chen

Improving Search Relevance for Short Query in Community Question Answering

WSDM 2014

Conference: ACM International Conference on Web search and Data Mining: 43-52;

Authors: **Haocheng Wu**, Wei Wu, Ming Zhou, Enhong Chen, Lei Duan, Heung-Yeung Shum

Question Retrieval with High Quality Answers in Community Question Answering

CIKM 2014

Conference: ACM International Conference on Information and Knowledge Management: 371-380;

Authors: Kai Zhang, Wei Wu, **Haocheng Wu**, Zhoujun Li, Ming Zhou

Entity Linking for Tweets

ACL 2013

Conference: Annual Meeting of the Association for Computational Linguistics: 1304-1311

Authors: Xiaohua Liu, Yitong Li, **Haocheng Wu**, Ming Zhou, Furu Wei, Yi Lu

REVIEWER EXPERIENCE

The 3rd International Conference on Behavioral, Economic, and Socio-Cultural Computing

BESC 2016

Location and Date: Duke University, Durham, NC, USA / 11-13 November, 2016

Role: Program Committee Member, reviewer for 5 papers

PATENTS

Method, Apparatus for Modulating GPS Sampling Frequency On Terminal Devices Authors: Haocheng Wu , Hui Wang Application Number: US15/069,461 (pending)	USA 2015
Method and Apparatus for Controlling Feedback Information Authors: Haocheng Wu , Hui Wang Application Number: US15/069,452 (pending)	USA 2015
Method and Apparatus for Controlling Alarms Authors: Haocheng Wu , Hui Wang Application Number: US14/994,364 (pending)	USA 2014
Method, Apparatus and System for Locating A Terminal Authors: Haocheng Wu , Hui Wang Application Number: US14/964,089 (pending)	USA 2014
Method, Apparatus and System for Multimedia Playback Control Authors: Haocheng Wu , Hui Wang Application Number: US14/934,383 (pending)	USA 2014
Method and Device for Motion Count Detection Authors: Haocheng Wu Application Number: US14/887,821 (pending)	USA 2014

MEDIA COVERAGE ON MY WORK

<u>Review: Mi Band 2 from Xiaomi – fitness-tracking features on a band with an OLED display</u>	South China Morning Post Jul. 2, 2016
<u>Xiaomi Just Unveiled Its Latest Wearable: The Mi Band 2</u>	Forbes Jun. 2, 2016
<u>China's Li Ning to team up with Xiaomi on 'smart' running shoes</u>	Reuters Mar. 16, 2015
<u>China's Xiaomi to start small in U.S., with earphones and bands</u>	Reuters Feb. 12, 2015
<u>Xiaomi unveils Mi 4 smartphone and Mi Band wristband</u>	BBC Jul. 22, 2014
<u>Microsoft tries again with chat robot Xiaobing</u>	China Daily USA Sep. 16, 2014
<u>With new Bing, is Microsoft the first to get 'social search' right?</u>	The Washington Post May. 11, 2012
<u>Microsoft Just Blew Google Away In Social Search</u>	Business Insider May. 10, 2012