#### Curriculum Vitae – December 28, 2019

# Qu Tang

Ph.D. Candidate

Department of Electrical and Computer Engineering

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#### Research Interests

Personal health informatics; computational sensing, applied machine learning for preventive health care; interactive machine learning; interpretable machine learning; data visualization; big data engineering; sensor-enabled mobile health technologies.

#### **Education**

#### Northeastern University, Boston, MA US

mHealth Research Group

Ph.D. Computer Engineering (In-progress)

Area of specialization: interactive machine learning, interpretable machine learning, activity recognition, wearable sensing

### Northeastern University, Boston, MA US

mHealth Research Group

M.S. in Electrical Engineering (May 2013)

Thesis title: Automatic smoking detection with wrist accelerometers

Advisor: Dr. Stephen Intille

Area of specialization: digital signal processing, activity recognition, applied machine

learning

Courses: Digital Signal Processing, Computer Vision, Machine Learning, Linear System Analysis, Computer Simulation and Evaluation, Mobile Application Development in Android, Adaptive Filtering, Time Series Analysis

### University of Electronic Science and Technology of China, Chengdu, Sichuan CN

Department of Opto-electronical Science and Technology Scholarships: National Scholarship of China (2007-2009)

# Professional Appointments and Research Experience

# Northeastern University, Boston, MA US

(January 2013-)

Research assistant, IT administrator, mHealth Research Group, Khoury College of Computer Sciences & Dept. of Health Sciences, Bouvé College of Health Sciences Research on topics related to applied machine learning for health technologies, activity recognition with wearable sensors, mobile sensing, ubiquitous computing. Mentoring of graduate and undergraduate students. IT Management.

## Schepens Eye Research Institute, Boston, MA US

(December 2011-August 2012)

Research engineer, Cooperative education (Coop), Vision Rehabilitation Laboratory Software development on eye tracking systems for vision rehabilitation technologies.

# Service (Editing and Reviewing)

Conference and Journal Reviewer (2013-present)

• Reviews for IEEE Sensors, ACM IMWUT.

# Service (Other Northeastern)

Coordinator of PHI seminar for Ph.D. students (September 2014-December 2014)

#### Publications in Refereed Journals

John, D., Tang, Q., Albinali, F. and Intille, S., 2019. An Open-Source Monitor-Independent Movement Summary for Accelerometer Data Processing. Journal for the Measurement of Physical Behaviour, 2(4), pp.268-281.

Henwoood, B., Redline, B., Dzubur, E., Madden, D., Rhoades, H., Dunton, G., Rice, E., Semborski, S., Tang, Q. and Intille, S., 2019. March. Investigating health risk environments for in housing programs for transition-aged youth. Annuals of Behavioral Medicine, 53, pp. S336-S336.

Houston, K.E., Bowers, A.R., Fu, X., Liu, R., Goldstein, R.B., Churchill, J., Wiegand, J.P., Soo, T., Tang, Q. and Peli, E., 2016. A pilot study of perceptual-motor training for peripheral prisms. Translational vision science & technology, 5(1), pp.9-9.

# Publications in Refereed Conference Proceedings

Goodwin, M.S., Haghighi, M., Tang, Q., Akcakaya, M., Erdogmus, D. and Intille, S., 2014. Moving towards a real-time system for automatically recognizing stereotypical motor movements in individuals on the autism spectrum using wireless accelerometry. In Proceedings of the 2014 ACM International Joint Conference on Pervasive and Ubiquitous Computing, pp. 861-872. ACM.

Tang, Q., Vidrine, D.J., Crowder, E. and Intille, S.S., 2014. Automated detection of puffing and smoking with wrist accelerometers. In Proceedings of the 8th International Conference on Pervasive Computing Technologies for Healthcare, pp. 80-87. ICST (Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering).

## Paper Presentations at Refereed Conference

Troiano, R., Intille, S., John, D., Chhetry, B.T. and Tang, Q., 2018. NHANES and NNYFS wrist accelerometer data: Processing 7TB of data for public access. In Journal of Physical Activity & Health, 15 (10), pp. S19-S19.

# Invited Workshop

Wayfair LLC

Participation PhD data science immersion program

Learning on data science practice, workflow, and tooling for modern industry. Two-day Hackathon: Predicting customer conversion rate of TV advertising.

### Teaching-Advising

Northeastern Research experiences for undergraduates (REU-D3): Gilbert Liang

(2019), Ryan Cleary (2018)

Teaching-

Northeastern CS 4300: Computer Graphics

Assisting

A project-oriented, intermediate course on computer graphics for senior undergraduates.

Spring, 2016.

**Other Interests** 

Software development, mobile/web app development, cooking, outdoor activities

Citizenship

China P.R.