Personal Informatics:
Collection

Renzhe Yu
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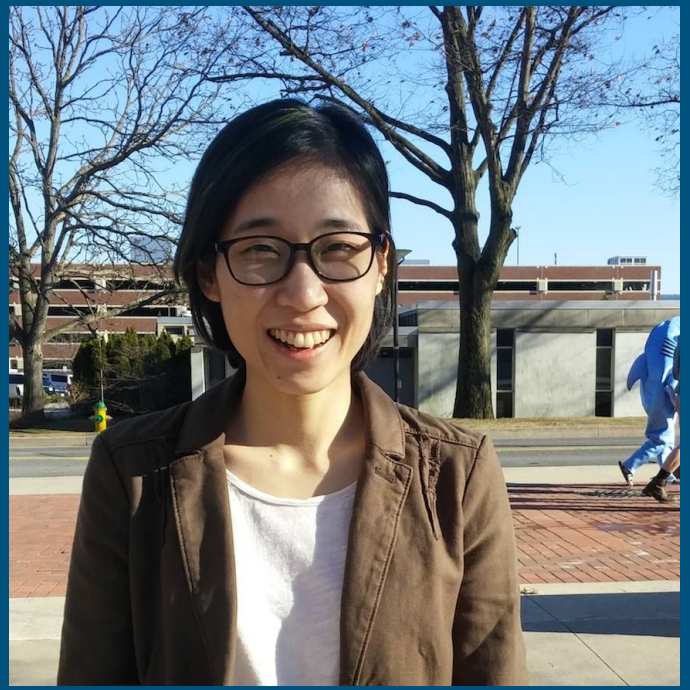
Study 1

Eun Kyoung Choe, Nicole B. Lee, Bongshin Lee, Wanda Pratt, and Julie A. Kientz. Understanding Quantified-Selfers' Practices in Collecting and Exploring Personal Data. CHI 2014.

Authors

Eun Kyoung Choe

- Assistant Professor at UMD’s iSchool (prev: Penn State IST)
- PhD (2014) from UW iSchool (Advisors: Julie A. Kientz and Wanda Pratt)
- Design personal informatics tools to support data collection, exploration and sharing in healthcare and drive behavioral change
- Most cited paper: *Understanding quantified-selfers' practices in collecting and exploring personal data (CHI ‘14)*



Authors

Nicole B. Lee

- PM at 18F (helps other government agencies build, buy, and share technology products) (prev: PM at Microsoft)
- MS (2013) from UW HCDE
- Working with Daniel Epstein (and sometimes other people)

Authors

Bongshin Lee

- Sr. Principal Researcher, HCI@MSR
- PhD (2006) from UMD CS (Advisor: Ben Bederson)
- Data visualization applied to data-driven storytelling and personal informatics
- Most cited paper: *Understanding quantified-selfers' practices in collecting and exploring personal data (CHI ‘14)*

Authors

Wanda Pratt

- Professor at UW iSchool (adjunct in Medical School) (prev: UCI ICS)
- PhD (1999) in Medical Informatics from Stanford
- Understand patients' information problems, develop and evaluate technologies to address those problems
- Most cited paper: *Healthcare in the pocket: mapping the space of mobile-phone health interventions (J. Biomed. Inform., 2012)*

Authors

Julie A. Kientz

- Professor at UW HCDE (adjunct in iSchool and CSE)
- PhD (2008) from Georgia Tech CS (Advisor: Gregory Abowd)
- Understand and reduce user burdens of interactive technologies for health and education
- Most cited paper (in 2010s): *Understanding quantified-selfers' practices in collecting and exploring personal data (CHI ‘14)*

Previous research

- Theoretical framework: Li et al.'s stage-based model (2010)
- A few studies on collection
  - Design and evaluate specific protocols/tools
  - Focused on a specific domain/problem
- Current study: first of its kind that
  - Systematically examines self-trackers' **in-the-wild** experience regarding data collection and exploration
  - Has a relatively larger sample size (N=83)

Research that follows

569 citations (Google Scholar)

- A wide range of themes
  - Updated high-level model (e.g., lived informatics)
  - Abandonment of self-tracking technologies
  - Data visualization and human-data interaction
  - Self-experimentation
  - ...

Research that follows

569 citations (Google Scholar)

- Most cited citations (of all time):
  - The quantified self (Book, 2016)

Research that follows

- Most cited citations (by year)
  - Self-tracking cultures: towards a sociology of personal informatics (OzCHI ‘14)
  - Why we use and abandon smart devices (UbiComp ‘15)
  - Boundary Negotiating Artifacts in Personal Informatics: Patient-Provider Collaboration with Patient-Generated Data (CSCW ‘16)
  - On Speculative Enactments (CHI ‘17)
  - Gamification, quantified-self or social networking? Matching users' goals with motivational technology (UMUAI, 2018)
  - How motivational feedback increases user's benefits and continued use: A study on gamification, quantified-self and social networking (IJIM, 2019)

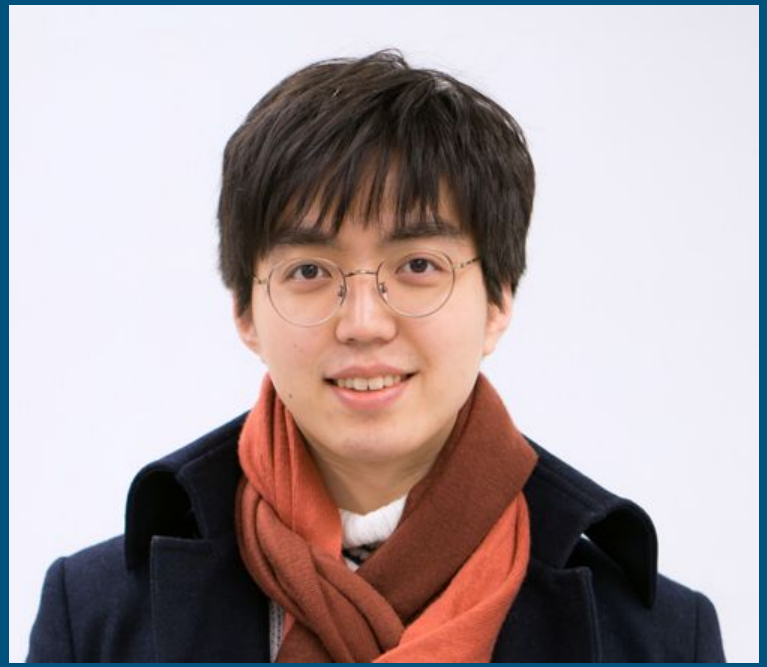
Study 2

Young-Ho Kim, Jae Ho Jeon, Bongshin Lee, Eun Kyoung Choe, and Jinwook Seo. OmniTrack: A Flexible Self-Tracking Approach Leveraging Semi-Automated Tracking. IMWUT 2017.

Authors

Young-Ho Kim

- Post-doc at UMD HCIL (advisor: Eun Kyoung Choe)
- PhD (2019) from Seoul National University (advisor: Jinwook Seo)
- Design interactive, visual, and mobile self-tracking systems for diverse tracking needs
- Most cited paper: *TimeAware: Leveraging Framing Effects to Enhance Personal Productivity (CHI '16)*



Authors

Jae Ho Jeon

- Software engineer at Kakao
- MS (2016) from Seoul National University (HCI)
- Involved in both OmniTrack and TimeAware

Authors

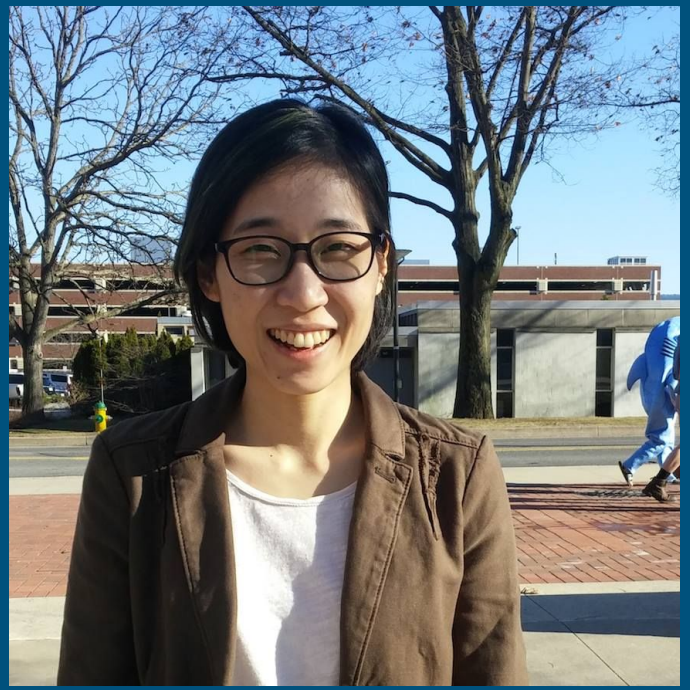
Bongshin Lee

- Sr. Principal Researcher, HCI@MSR
- PhD (2006) from UMD CS (Advisor: Ben Bederson)
- Data visualization applied to data-driven storytelling and personal informatics
- Most cited paper: *Understanding quantified-selfers' practices in collecting and exploring personal data (CHI ‘14)*

Authors

Eun Kyoung Choe

- Assistant Professor at UMD’s iSchool (prev: Penn State IST)
- PhD (2014) from UW iSchool (Advisors: Julie A. Kientz and Wanda Pratt)
- Design personal informatics tools to support data collection, exploration and sharing in healthcare and drive behavioral change
- Most cited paper: *Understanding quantified-selfers' practices in collecting and exploring personal data (CHI ‘14)*



Authors

Jinwook Seo

- Professor at Seoul National University (CSE, director of HCIL)
- PhD from UMD CS (Advisor: Ben Shneiderman)
- HCI, infoviz, visual analytics, health informatics
- Most cited paper: *Interactively exploring hierarchical clustering results [gene identification] (Computer, 2002)*

Important previous research

- Li et al.’s stage based model (2010): multi-faceted self-tracking
- Semi-automated tracking (2017)
  - Data capture feasibility
  - Purpose of self-monitoring
  - Motivation level

Update of the project

OmniTrack for Research is now open source!

A Research Platform for Conducting In-Situ Data Collection Studies

We recently opened the source code of both the research platform backend and the OmniTrack Android application. The repository is in https://github.com/OmniTrack/omnitrack_for_research. We are currently writing a **user guide and documentation** in WIKI page (https://github.com/OmniTrack/omnitrack_for_research/wiki). Refer to the WIKI page to setup and manage your own OmniTrack server. When the documentation gets mature enough, we will publicly announce **OmniTrack for Research** and notify the subscribers.

Subscribe to our release news

Call for Researchers

We are looking for researchers who are interested in conducting a data collection study by ***diaries*** or ***experience sampling (EMA)*** using the OmniTrack platform. We are working on a research platform by extending OmniTrack to be used by researchers for conducting data collection studies. As a first step of this, we are designing the researchers' interface which supports diary study.

The example diary studies we envision follows:

1. Self-report diaries which are personalized for each participant
2. Self-reports + passively gathered fitness device data
3. Data collection involving multiple sensing devices

Research that follows

30 citations on Google

- 6 self-citations
- Mostly cited as an example of semi-automated or flexible self-tracking
- Most cited: *Flexible and Mindful Self-Tracking: Design Implications from Paper Bullet Journals (CHI ‘18)*