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CONTACT INFORMATION	Senior Research Scientist Suno	<i>e-mail:</i> nediyana@gmail.com <i>www:</i> www.nediyana.com
RESEARCH INTERESTS	Human-Computer Interaction; human-AI interaction; personalization; health-tracking; self-experiments; sleep tracking; personal informatics; well-being	
EDUCATION	<b>Brown University</b> , Providence, Rhode Island USA Ph.D., Computer Science, 05/24/2020 <ul style="list-style-type: none"><li>• Dissertation Topic: “Personalized Systems for Guided and Flexible Self-Experiments”</li><li>• Adviser: Prof. Jeff Huang</li></ul> M.S., Computer Science, 05/28/2016  <b>Grinnell College</b> , Grinnell, Iowa USA B.A. with honors, Computer Science, 05/24/2014	
EXPERIENCE	<b>Suno</b> , Senior Research Scientist Address: 17 Dunster Street, Cambridge, MA 02138 Manager: Martin Camacho I conduct research studies focused on human-AI interaction around music listening and AI music generation.	<b>03/19/2024 - present</b>
	<b>Spotify</b> , Research Scientist Address: 3 Center Plaza, Boston, MA 02108 Manager: Sam Way I conducted research studies focused on human-AI interaction around music and podcast listening.	<b>07/06/2020 - 03/04/2024</b>
	<b>Brown University</b> , Researcher Address: 115 Waterman Street, Providence, RI 02906 Manager: Jeff Huang I conducted user studies and interviews, conducted background literature review, and wrote an academic paper based on the findings. The paper has been accepted for publication at CHI 2021.	<b>06/01/2020 - 06/30/2020</b>
	<b>Brown University</b> , Graduate Student Collaborated with sleep clinicians and behavior change researchers on developing systems for self-experiments through user studies, usability testing, prototyping, programming the back-end server of the systems, deploying them to the app store.	<b>09/01/2014 - 05/24/2020</b>
	<b>Instagram UX Research</b> , Research Intern Address: 770 Broadway, New York, NY 10003 Manager: Sebastian Fite I conducted research to support the broader UX research team at Facebook. Specifically, I worked with Sebastian Fite on Instagram’s Discovery Explore team. I conducted in-lab usability studies, prototype testing, and a diary study, and I analyzed the data from them. I also presented the findings to various stakeholders, and wrote up the findings in internal reports. I collaborated closely with a team of data scientists, designers, PMs.	<b>06/18/2018 - 08/31/2018</b>
	<b>Microsoft Research</b> , Research Intern Address: 1 Microsoft Way Redmond, WA 98052	<b>04/03/2017 - 06/30/2017</b>

Manager: Jessica Lundin

I conducted research to support the Health Intelligence team at Microsoft. I worked with a team of data scientists and UX designers on building a system to generate personalized recommendations for improving sleep. I ran a study to evaluate the effectiveness of cohort-based recommendation for healthy sleep. I also mined signals from the existing 40 million sleep records from the Microsoft Band. We published a paper to Ubicomp 2018.

**Yahoo**, UX Research Intern

**06/06/2016 - 08/26/2016**

Address: 701 1st Ave, Sunnyvale, CA 94089

Manager: Brooke White

I conducted research to support the broader Communications team at Yahoo including Yahoo Mail, Messenger, and Flickr. I designed, conducted, and analyzed data from generative and evaluative studies, presented the findings to teams of various stakeholders, and wrote both internal reports and academic papers based on findings. I conducted weekly in-lab user studies, diary studies, and online surveys. Conducted research on the use of email and coupons in email. We published a paper and two case studies at CHI 2017.

**Grinnell College**, Undergraduate researcher

**June 2013 - May 2014**

Worked with Prof. Janet Davis to research persuasive technology design methodologies to improve student wellness behaviors (focusing on sleep) at Grinnell College. Used a participatory design approach to create and evaluate experience prototypes.

## RESEARCH PROJECTS

**SleepCoach** (available on [Google Play store](#) and [App Store](#))

Developed a system, SleepCoach, which guides users through single-case experiments for sleep by collecting raw mobile sensor data and generating personalized, data-driven recommendations based on a collection of templates recommendations created with input from clinicians.

**Self-E** (available on [Google Play Store](#))

Developed a system, Self-E, which guides novice self-experimenters through the steps of conducting a single-case experiment and applies a Thompson Sampling technique to automatically analyze the data.

**Self-Experiments**

Developed a set of guidelines for running self-experiments based on two cohorts of students. By encouraging people to iterate on their experiments, the guidelines aim to make the process more practical for novices. We present these guidelines for future self-experiments and designers of self-experimentation tools.

## PUBLICATIONS

Y. Liang , A. Ponnada, P. Lamere, **N. Daskalova**. “Enabling Goal-Focused Exploration of Podcasts in Interactive Recommender Systems.” IUI 2023. (24% acceptance rate)

S. Petridis, **N. Daskalova**, S. Mennicken, S. Way, P. Lamere, J. Thom. “TastePaths: Enabling deeper exploration and understanding of personal preferences in recommender systems.” IUI 2022. (24.5% acceptance rate)

**N. Daskalova**, E. Kyi, K. Ouyang, A. Borem, S. Chen, S. Park, N. Nugent, and J. Huang “Self-E: Practical Self-Experiments.” CHI 2021. (26.3% acceptance rate)

**N. Daskalova**, Y. Wang, C. Araujo, G. Beltran, J. Yoon, N. Nugent, J. Williams, and J. Huang “SleepBandits: Guided Flexible Self-Experiments for Sleep.” CHI 2020. (24.3% acceptance rate)

**N. Daskalova**, B. Lee, J. Huang, C. Ni, and J. Lundin. “Investigating the Effectiveness of Cohort-Based Sleep Recommendations.” Ubicomp 2018. (27.9% acceptance rate)

	<p><b>N. Daskalova.</b> “Personalized Behavior-Powered Systems for Guiding Self-Experiments.” CHI Doctoral Consortium 2018.</p> <p><b>N. Daskalova,</b> K. Desingh, A. Papoutsaki, D. Schulze, H. Sha, and J. Huang. “Lessons Learned from Two Cohorts of Personal Informatics Self-Experiments.” Ubicomp 2017. (21% acceptance rate)</p> <p>F. Bentley, <b>N. Daskalova,</b> N. Andalibi. “If a person is emailing you, it just doesn’t make sense”: Exploring Changing Consumer Behaviors in Email.” CHI 2017. (25% acceptance rate)</p> <p><b>N. Daskalova,</b> D. Metaxa-Kakavouli, A. Tran, N. Nugent, J. Boergers, J. McGeary, and J. Huang. “SleepCoacher: A Personalized Automated Self-Experimentation System for Sleep Recommendations.” UIST 2016. (20.6% acceptance rate)</p> <p>A. Papoutsaki, P. Sangkloy, J. Laskey, <b>N. Daskalova,</b> J. Huang, and J. Hays. “Webgazer: Scalable webcam eyetracking using user interactions.” IJCAI 2016. (25% acceptance rate)</p> <p><b>N. Daskalova,</b> N. Ford, A. Hu, K. Moorehead, B. Wagnon, and J. Davis. “Informing Design of Suggestion and Self-Monitoring Tools through Participatory Experience Prototypes.” Persuasive 2014.</p>	
CASE STUDIES AND WORKSHOPS	<p><b>N. Daskalova,</b> S. Mennicken, C. Chen, J. Thom. “User-Centric Design Methods for Reinforcement Learning.” RL4HCI Workshop paper, CHI 2021.</p> <p><b>N. Daskalova,</b> F. Bentley, N. Andalibi. “It’s All About Coupons: Exploring Coupon Use Behaviors in Email.” Case Study, CHI 2017.</p> <p>F. Bentley, <b>N. Daskalova,</b> Brooke White. “Comparing the Reliability of Amazon Mechanical Turk and Survey Monkey to Traditional Market Research Surveys.” Case Study, CHI 2017.</p> <p><b>N. Daskalova,</b> J. Ma, T. Chen, V. Nguon, J. Qian, C. Chen and J. Huang. “HeyPillow: Computationally Guided Sleep Behavior Study Through Sensing.” WISH symposium, CHI 2019.</p>	
HONORS AND AWARDS	<p>Invitation &amp; travel grant for CHI’18 Doctoral Consortium <b>2018</b></p> <p>Brown University Travel Grant for CHI’16, CHI’17 <b>2016, 2017</b></p> <p>Brown University Travel Grant for UbiComp’17, Ubicomp’18 <b>2017, 2018</b></p> <p>Best Aging in Place Hack at MIT’s Grand Hack 2016 <b>2016</b></p> <p>ACM-W Scholarship for UIST’16 <b>2016</b></p> <p>Brown University Travel Grant for GHC of Women in Computing <b>2014, 2016</b></p> <p>Invitation &amp; travel grant for CRA-W Grad Cohort Workshops <b>2015, 2016</b></p> <p>Dropbox Scholarship for Grace Hopper Celebration of Women in Computing <b>2013</b></p>	
TEACHING EXPERIENCE	<p><b>Graduate Teaching Assistant,</b> Brown University</p> <ul style="list-style-type: none"> <li>• CS1300: User Interfaces. Fall 2015, Fall 2016.</li> <li>• CS2951-r: Personal Informatics Seminar. Spring 2016.</li> <li>• CS2300: Human-Computer Interaction Seminar. Spring 2018.</li> </ul> <p><b>Teaching Assistant and Grader,</b> Grinnell College</p> <ul style="list-style-type: none"> <li>• CS151: Functional Problem Solving. Fall 2013.</li> <li>• CS161: Imperative Problem Solving. Spring 2013, Spring 2014.</li> </ul>	
REVIEWER EXPERIENCE SERVICE	<p>CHI (2015-2022), CSCW (2016, 2019, 2020), Ubicomp (2021), WWW 2015</p> <p><b>Brown University</b></p>	

PhD Student Mentorship Program Founder	Aug 2018 - May 2020
Hackathon Mentor: HealthHacks RI, Innovate4Sleep	Oct 2019
Student Volunteer: UIST'16, Ubicomp'17, Ubicomp'18, CHI'19	2016-2019
Event Coordinator, Graduate Women in CS	Aug 2014 - May 2020
Diversity Committee Member	Jan 2018 - Dec 2020
Panelist for Applying to Graduate School in STEM	Mar 2017
PhD Recruitment Coordinator	Sep 2014 - May 2015
Department Representative, Graduate Student Council	Spring 2015

### Grinnell College

Student Educational Policy Committee	Spring 2015, Fall 2015
Hall Wellness Coordinator	Sep 2011 - Aug 2013
Social Event Coordinator, International Student Organization	May 2011 - May 2012

### RELEVANT COURSEWORK

#### Brown University

- Personal Informatics Seminar
- Designing & Developing User Interfaces
- Human-Computer Interaction Seminar
- Data Science
- Web Apps
- Experimental Data Analysis
- Computational Vision
- Applied Artificial Intelligence

#### Grinnell College

- Discrete Structures
- Analysis of Algorithms
- Software Design
- Computer Organization and Architecture
- Cognitive Psychology & Decision-Making
- Behavioral Psychology
- Neuroscience of the Social Brain
- Positive Psychology

### CERTIFICATES

Effective Performance Workshops, Brown University	May 2018
Certificate I: Sheridan Teaching Seminar - Reflective Teaching, Brown University	Spring 2016

### INVITED TALKS

*Practical Self-Experiments with Self-E.* Emergency Digital Health Innovation (EDHI) Program Seminar at the Department of Emergency Medicine, Brown University. October 2019.

*Guiding Cohorts into Sleep Recommendations through Self-Experiments.* Scientific Staff Meeting (SSM) of the Division of Sleep and Circadian Disorders (DSCD) at Brigham and Women's Hospital and Harvard Medical School. February 2019.

*Personalized Behavior-Powered Systems for Guiding Self-Experiments.* **Rising Star series** at University of Massachusetts Amherst. November 2018.

*Guiding Cohorts into Sleep Recommendations through Self-Experiments.* Providence Sleep Research Interest Group (PSRIG) at the E.P. Bradley Sleep Research Lab. November 2018.

*SleepCoach: A Personalized Automated Self-Experimentation System for Sleep Recommendations.* Microsoft Research. April 2017.

*Evaluation.* Guest Lecture for User Interfaces class. Brown University. November 2016.

### STUDENT MENTORING

Savvas Petridis, PhD student intern at Spotify (summer 2021)  
Yusuf Karim, undergraduate student (Aug 2019-May 2020)  
Andrew Park, Eindra Kyi, Maria Kloiber, visiting undergraduate research students (summer 2019)  
Niharika Jhingan, Kevin Ouyang, undergraduate students (Jan 2019-May 2020)

Lisa Wang, undergraduate student (Jan 2018-Dec 2019)  
Cintia Araujo, Angel Suet Yan Cheung, undergraduate students (Aug 2018-2019)  
Ishaan Agarwal, undergraduate student (2017-2019)  
Jina Yoon, undergraduate student (2016-2018)  
Guillermo Beltran, undergraduate student (2015-2017)  
Guo Wang, Dominique Moore, undergraduate students (2017)  
Adrienne Tran, undergraduate student (2015-2016)  
Danaë Metaxa-Kakavouli, undergraduate student (2014-2015), now a PhD student at Stanford

#### SELECTED PRESS

##### **Brown researchers developing new interactive sleep app**

Brown University News (November 2016)  
<https://news.brown.edu/articles/2016/11/sleepcoacher>

##### **Brown scientists developing new self-contained SleepCoacher app**

News Medical Life Sciences (November 2016)  
<https://www.news-medical.net/news/20161101/Brown-scientists-developing-new-self-contained-SleepCoacher-app.aspx>

##### **How your smartphone can actually improve your sleep**

South China Morning Post (February 2017)  
<http://www.scmp.com/lifestyle/health-beauty/article/2067203/how-your-smartphone-can-actually-improve-your-sleep>

##### **Novel interactive app to improve sleep**

Yahoo News (November 2016)  
<https://sg.news.yahoo.com/novel-interactive-app-improve-sleep-083603245.html>

##### **Why Yahoo thinks it may be time to blow up your inbox**

FastCompany (S. Melendez, May 2017)  
<https://www.fastcompany.com/40419395/why-yahoo-thinks-its-time-to-blow-up-your-inbox>

##### **Be ready to roll on Black Friday with Yahoo Mail's handy coupon list**

Digital Trends (Christian de Looper, November 2016)  
<https://www.digitaltrends.com/mobile/yahoo-mail-coupons-smart-travel-view/>

##### **An Interdisciplinary Team Including Multiple Brown CS Students Wins An Award At MIT Grand Hack 2016**

Brown CS News (Jesse Polhemus, May 2016)  
<http://blog.cs.brown.edu/2016/05/05/interdisciplinary-team-brown-wins-award-mit-grand-hack-2016/>