BIOGRAPHICAL SKETCH

NAME: Hye-Jin Nae

eRA COMMONS USER NAME: Nae

POSITION TITLE: Assistant Professor

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE *(if applicable)*	Completion Date MM/YYYY	FIELD OF STUDY
Sung Shin Women's University, Seoul, South Korea	BA	02/1999	Clothing & Textile Design
University of Wisconsin, Stevens Point, WI	BFA	06/2002	Graphic Design
Rochester Institute of Technology, Rochester NY	MFA	12/2004	Computer Graphics Design

A. Personal Statement

Hye-Jin Nae is an Assistant Professor in the School of Design at the Rochester Institute of Technology. Hye-Jin's 17 years of professional, research and scholarly work focuses on the design, prototyping, testing, and developing user experience and interface designs for consumer products, online media, and mobile solutions. With corporate limitations placed on publication opportunities during Hye-Jin's professional career, her extensive industry recognitions and distinguished awards represent more traditional forms of professional productivity and accolades within the fields of user interface and user experience design. During her recent transition to academia, Hye-Jin has successfully published and presented papers for leading national and international conferences and organizations of design and human computer interaction. In addition, Hye-Jin was the PI on a U.S. Department of Homeland Security (DHS) grant program for "Countering Violent Extremism (CVE). Hye-Jin Nae's extensive design experience, creative leadership, and previous work on the Fully Integrated Toilet (FIT) Seat interface explorations provide her the robust design capabilities to advance the proposed research project.

Before joining RIT, Hye-Jin Nae was a senior interaction designer at Eastman Kodak Co. She designed user interfaces for new consumer products and emerging form factors including consumer electronics and touch-based kiosks: Kodak EasyShare v6.0, Kodak Picture Kiosk, Kodak EasyShare Gallery, Kodak Health Imaging, Kodak Professional Imaging Solutions, Motorola Camera Phone Development, and Kodak Digital Camera Advanced User Experience. After leaving Kodak, she became a lead visual designer at Yahoo! Inc. where she designed and developed largescale consumer experiences such as Yahoo! Health redesign which had over a billion unique visitors per month in 2008 when the project launched. Moving to EffectiveUI as a creative director and lead experience architect, Hye-Jin leveraged her wide-ranging visual and interaction design background to lead technical and creative teams in building digital solutions for Honeywell, Pepsi, Sengled, Ogilvy & Mather, TIAA-CREF, Adobe, Kaspersky, Fidelity, American Express, UX magazine, and BlueShield California.

Her academic work specializes in researching and creating tools that support design education and curriculum for interdisciplinary audiences. In addition to teaching and research, she contributes her design capabilities to the RIT Personalized Healthcare Technology, Signature Interdisciplinary Research Area. As PI for the DHS-CVE grant, Hye-Jin and the research team developed an open-access digital system to help others create awareness to stop the spread of hate and violence online. Project solutions were created by leveraging emerging tools with a diverse team of students. The project and researchers received notable recognitions. Hye-Jin also developed an online web-based repository to promote the principles of Universal Design, Typography, and Visual Design through an easy-to-use set of online tools and resources for non-design faculty and students as PI for the Provost's Learning Innovation Grants.

As part of this proposal and research team, Hye-Jin will utilize her professional application design and development in creating user-focused mobile and tablet applications and web-based data-driven applications. Her ability to research, plan, design and test user experience solutions across a wide spectrum of product spaces will allow for the FIT research project to effectively integrate the data capture and medical review requirements of the project.

B. Positions and Honors

Positions and Employment

2004-2007: Sr. Visual Interaction Designer, Eastman Kodak Co., Rochester, NY
2007-2008: Lead Visual Designer, Yahoo! Inc., Santa Monica, CA
2008-2010: Assistant Professor, Graphic Design – School of Design, RIT
2010-2014: Creative Director and Lead Experience Architect, EffectiveUI, Rochester, NY
2014-2016: Visiting Assistant Professor, New Media Design – School of Design, RIT
2018-2020: Founding Startup Member, Heart Health Intelligence (renamed as Casana), Rochester, NY
2016-Present: Assistant Professor, New Media Design – School of Design, RIT

Honors

2006 Consumer Electronics Show (CES) honorable mention, USA
Project: Kodak EasyShare Gallery Premier Service / Role: Lead Designer, Design Concept, and Art Direction

2006 Best of the Web 2006 in Photo Sharing category, Businessweek, USA
Project: Kodak EasyShare Gallery / Role: Lead Designer, Design Concept, and Art Direction

2006 Winner of American InHouse Design Awards: Multimedia and Interactive category, USA
Project: Kodak Picture Kiosk / Role: Co-Designer, Design Concept, and Direction

2006 iF Communication Design Awards: Digital Media Interface category, Germany
Project: Kodak Picture Kiosk Picture Terminal / Role: Co-Designer, Design Concept, and Art Direction

2006 iF Communication Design Awards: Digital Media Interface category, Germany
Project: Kodak EasyShare software V6.0 / Role: Lead Designer, Design Concept, and Art Direction

2007 Best of the Web 2007 in Health category, Businessweek, USA
Project: Yahoo! Health / Role: Lead Designer

2007 Silver, W3 Awards in Health category, USA
Project: Yahoo! Health / Role: Lead Designer

2007 Silver, W3 Awards in Lifestyle category, USA
Project: Yahoo! Health / Role: Lead Designer

2012 Finalist, MITX (Massachusetts Innovation & Technology Exchange) Interactive Awards
Project: Kaspersky Mobile Website (US) / Role: Project Lead, Creative Director & Lead Experience Architect

2013 Honored, Awards of Distinction, Communicator Awards: Health Care category
Project: TriZetto Website / Role: Co-Designer

2013 Best of Show, ITEXPO East 2013
Project: Allworx Reach (Mobile & Tablet Application) / Role: Project Lead, Creative Director & Lead Designer

2013 Winner, Awards of Distinction, Communicator Awards: Mobile Websites Business category
Project: Kaspersky Mobile Website (US) / Role: Project Lead, Creative Director & Lead Experience Architect

2014 Nominee, WPP Awards
Project: Pepsi, Super Bowl XLVIII AD Tracker / Role: Creative Director & Lead Designer

2018 Finalist, Richard and Virginia Eisenhart Provost's Award for Excellence in Teaching
Rochester Institute of Technology / Role: Assistant Professor

2018 Winner of American InHouse Design Awards: Internet category, USA
Project: Personalized Healthcare Technology Research Initiative at RIT / Role: Creative Director and Lead Designer

2019 Mentor of the Community Impact Award, USA
Rochester Institute of Technology / Role: Assistant Professor

2019 Excellence in Student Life Mentor, USA
Rochester Institute of Technology / Role: Assistant Professor

2020 Frank J. Romano Endowed Prize Award for Publishing Entrepreneurship, CAD, RIT, USA
Project: Ex-Out Research Project / Role: PI, Creative Director, Editor, Project Manager

2020 Finalist, Communication Arts Design Competition, Identity manual category, USA
Project: Ex-Out Research Project / Role: PI, Creative Director, Editor, Project Manager

2020 Winner, GDUSA Web Awards, UX Design Application category, USA
Project: Ex-Out Research Project / Role: PI, Creative Director, Editor, Project Manager

2020 Excellence, UCDA Design Awards, Other digital category, USA
Project: Ex-Out Research Project / Role: PI, Creative Director, Editor, Project Manager
2020 Gold, UCDA Design Awards, Mobile apps category, USA
Project: Ex-Out Research Project / Role: PI, Creative Director, Editor, Project Manager
2020 Judge's choice, UCDA Design Awards, Other digital category, USA
Project: Ex-Out Research Project / Role: PI, Creative Director, Editor, Project Manager
2020 Winner, American Graphic Design Awards, Public Service + Pro Bono category, USA
Project: The Design Guide Research Project / Role: PI, Creative Director, Editor, Project Manager
2020 Bronze, International Design Awards (IDA), Multimedia-Mobile & Web Application Design, USA
Project: Ex-Out Research Project / Role: PI, Creative Director, Editor, Project Manager
2021 Gold, The American Advertising Awards, Interactive Digital Publications, Campaign category, USA
Project: Ex-Out Research Project / Role: PI, Creative Director, Editor, Project Manager
2021 Freelancer of the Year–Shortlist Winners, Indigo Design Awards, Netherlands
Project: Ex-Out Research Project / Role: PI, Creative Director, Editor, Project Manager
2021 Gold, Indigo Design Awards, Integrated Graphic Design for Social Change, Freelancer, Netherlands
Project: Ex-Out Research Project / Role: PI, Creative Director, Editor, Project Manager
2021 Gold, Indigo Design Awards, Apps for Social Change, Freelancer, Netherlands
Project: Ex-Out Research Project / Role: PI, Creative Director, Editor, Project Manager
2021 Nominee, The Webby Awards, Mobile App, Public Service Activism category, USA
Project: Ex-Out Research Project / Role: PI, Creative Director, Editor, Project Manager

Patents

2010 Patent: Transitional computer user interface for a display screen, USA
US Patent no. D621850 / Project: Yahoo! Shine Homepage Design / Role: Co-Designer
2010 Patent: Graphical user interface for computer screen, USA,
US Patent no. D612860 / Project: Yahoo! Health Guru Experts Site Design / Role: Lead Designer
Project: Yahoo! Health / Role: Lead Designer

C. Contributions to Science

1. **Integrated Interdisciplinary Design Education.** The value and impact of applied design and design process represent a significant component moving industries and products forward. These design champions range from Apple and other consumer product leaders, venture capital firms such as Kleiner Perkins Caufield and Byers and industry and educational innovators like John Maeda. The Design Management Institute has been tracking the performance of design-centric companies and has shown that they outperformed the S&P 500 between 2005-2015 by 211%. This emergence of applied design has been the basis of my research in exploring and creating an undergraduate curriculum that incorporates design practice in a multi-disciplinary setting with STEM disciplines. Based on professional experience, academic research and curricular application Hye-Jin's research and work have helped lead to the inclusion of design education as a required component within multiple Bachelor of Science programs across the institute. She has featured the expansion of applied design and aesthetic principles for non-traditional designers in numerous papers and talks.

    a. **Nae, Hye-Jin** (2019, April). Experience, Learn and Design to be Inclusive, Raise Awareness and Persuade in an Interdisciplinary Program. Presented at the AIGA National Design Conference, Pasadena, Pasadena Convention Center.

    b. **Nae, Hye-Jin** (2017, October). Multidisciplinary New Media Design Undergraduate Program. Paper presented at the Digital Media and Learning Conference, Irvine, University of California.

    c. **Nae, Hye-Jin** (2017, June). Motion design for data visualization and interactive prototypes. Published paper and presented at Motion Design Education Summit, Columbus, Ohio State University.

    d. **Nae, Hye-Jin**, and Wood, Timothy (2017, June). Design is STEM! Understanding Interdisciplinary Design Practice, Education, and Research. Presented at AIGA Converge Conference, LA, University of Southern California.

    e. **Nae, Hye-Jin** (2017, April). An Interdisciplinary Design Education Framework. Published paper and presented at Design for Next, Rome, Italy, Sapienza University.

f. **Nae, Hye-Jin** (2017, February). Typography education in an interdisciplinary program through inclusive projects. Published paper for The International “Typography Day” conference in Sri Lanka, University of Moratuwa.

2. **Data-Driven User-Centered Interface Solutions.** The complexity of integrated systems and data-driven applications require a user-centered approach for multi-platform interfaces. The design process focuses on communication, visual and interaction principles and models to create useful solutions across domains. Through my interactive interface patents at Yahoo! Health, custom mobile apps for BlueShield California and SAP-based financial tools, Kodak consumer and healthcare imaging tools along with other award-winning designs provide solutions that allow for rapid information retrieval, user understanding, and accurate task completion. Through iterative user experience design processes, usability testing, and user analytics, today’s design-focused interactive experiences can meet the needs of the user regardless of the depth and complexity of the domain.

D. Additional Information: Research Support and/or Scholastic Performance

Ongoing Research Support

NINR/ NIH (1R01NR018301-01A1) Nae (Co-PI) Wang (PI formerly Borkholder) 6/18/2020-3/31/2025
National Institute of Health Amount: $2,990,975.00
Inconspicuous Daily Monitoring to Reduce Heart Failure (HF) Hospitalizations
As a Co-PI, Hye-Jin Nae is in charge of research and digital design solutions for patient data visualization and HF medical review integration. Nae is responsible for contributions in the development and design of the wellness and data visualization applications, working with the APP panel and HF physicians/ cardiologists. Description: The NIH grant was proposed and submitted in partnership with PI David Borkholder, Ph.D., Bausch and Lomb Professor, Microsystems Engineering and Professor, Electrical and Microelectronic Engineering and Co-PI Linwei Wang, Ph.D., Professor of Computing and Information Sciences at RIT. Dr. Borkholder and Wojciech Zareba, M.D., Professor of Medicine, Cardiology, at the University of Rochester Medical Center, lead a multidisciplinary RIT and URMC research team. Dr. Zareba's URMC team includes cardiologists and research-faculty members: Karl Schwarz, M.D., Director of the Echocardiography Laboratory; Leway Chen, M.D., Medical Director of the Advanced Heart Failure Program; and Robert Strawderman, Chair and Distinguished Professor of Biostatistics and Computational Biology. The research project focuses on in-home monitoring technologies that have the potential to transform the healthcare system by enabling the transition from reactive care to proactive and preventive care.

DHS-16-OCP-132-00-01 Nae (PI) 1/1/2018-12/31/2019
Department of Homeland Security Amount: $149,955.00
It’sTime: #ExOut Extremism. This project aims to encourage counter-narratives to violent extremism and online recruitment by leveraging social media’s power and design by sharing positive narratives that combat negative stereotypes and promote a culture of tolerance and inclusion. The research team developed a self-contained and sustainable mobile and web solution that focuses on building a system of open-access digital materials and a design guide for creative online activism for organizations and individuals. Role: PI

PLIG-Provost’s Learning Innovation Grant Nae (PI) 5/1/2017-10/01/2018
Rochester Institute of Technology Amount: $5,000
The Design Guide. This research aims to develop an online web-based repository to promote the principles of Universal Design, Typography and Visual Design through an easy-to-use set of online tools and resources for non-design faculty and students. The implemented solution will give targeted audiences the ability to adapt and incorporate design thinking and practice into a broad range of courses and projects. Role: PI