

NANCYRASCHE

ACADEMIC RESUME: PURDUE UNIVERSITY

CLINICAL ASSISTANT PROFESSOR
HUMAN CENTERED DESIGN AND DEVELOPMENT
PURDUE UNIVERSITY

CONTACT

4080 Huntsman Drive
Zionsville, IN 46077
M 317.490.9362
nrasche@purdue.edu
Personal website:
web.ics.purdue.edu/~nrasche

CAMPUS

KNOY 321
401 N. Grant St
West Lafayette, IN 47907
O 765.494.6222
PPI profile:
polytechnic.purdue.edu/
profile/nrasche
CGT17207 website:
engineering.purdue.edu/
ExStudio

EDUCATION

MFA Interaction Design, Purdue University, December 2013 **GPA: 3.90**

Research: Human centered design strategy for the development of mobile applications as instructional aids for children with special needs.

Thesis: *Design Strategy for the Development of Applications for Autism Instruction*
http://docs.lib.purdue.edu/open_access_theses/127/

Awards: Purdue ICC Student Grant Winner, March 2013: \$3000

Undergraduate Mentor: Collaboration with Rose-Hulman Institute of Technology senior thesis group for development of *SPEAKmore!* application: Aug 2012-May 2013

Solo Exhibition: Patti and Rusty Reuff Galleries, *Literacy Labels: Improve Literacy Instruction for Children with Autism Spectrum Disorders*, April 2013

Presentations: American Studies Symposium Presenter, Purdue University, April 2013

BA Industrial Design, Purdue University, May 1999 **GPA: 3.41**

Awards: Senior Award of Excellence & IDSA Student Merit Award Winner, April 1999
INDesign Silver Award, Heineken "Who Can?" Runner up, Jan 1999

Work: Industrial Design Intern: Full time intern at Compression, Inc., a consulting company in Indianapolis, from May 1998 to May 1999

PROFESSIONAL EXPERIENCE

Clinical Assistant Professor, Purdue University, West Lafayette, IN: July 2015 - Current
Human Centered Design and Development, CGT Department

Leads the student based learning collaborative Experience Studios (CGT17207, CGT27207, and CGT37207) where students are placed in teams to work on industry sponsored projects.

Visiting Lecturer, Purdue University, West Lafayette, IN: Jan 2014 - May 2015

Industrial/Interaction Design, Art and Design Department

Taught freshmen through graduate courses in Industrial Design and Interaction Design.

Graduate Teaching Assistant, Purdue University, West Lafayette, IN: Jan 2011 - Dec 2013

Industrial Design, Art and Design Department

Roles: Taught Industrial Design courses (five semesters at 75% teaching load)

Created syllabus, outlines, and deliverables for courses.

Instructor, Purdue University, West Lafayette, IN: Aug 2002 - Dec 2010

Industrial Design, Art and Design Department

Taught freshmen through senior courses in Industrial Design.

PROFESSIONAL EXPERIENCE, cont.

User Experience Design and Graphic Design Consultant, Speak Modalities, speakmod.com,
West Lafayette, IN: Jan 2012 - May 2015
Alternative communication application design company

Owner/Industrial Designer, PD Outsource, Zionsville, IN: Jan 2002 - Dec 2010
Industrial Design consulting firm

Industrial Design Associate, Catalyst PDG, Inc catalystpdg.com Indianapolis, IN: May 1999 - May 2002
Product design and development consulting firm

DEVELOPMENT ACTIVITIES ATTENDED

Workshop, "Designing for Student Engagement," Olin College of Engineering, Needham, MA. (June 6-10, 2016).

Conference Attendance, "Engagement and Service-Learning Summit," Office and Engagement, Center for Instructional Excellence, and Purdue Honors College, West Lafayette, IN, USA. (March 10, 2016).

Workshop, "Ideation Workshop, Frank Garofalo," Esri Interactive, West Lafayette, Indiana, United States. (November 13, 2015).

Conference Attendance, "World Usability Day," Indiana Chapter of User Experience Professional Association (UXPA), Indianapolis, IN, USA. (November 12, 2015).

Conference Attendance, "Midwest User Experience (MWUX) Conference," IxDA, Pittsburgh, PA, USA. (October 1, 2015 - October 3, 2015).

Workshop, "IMPACT training workshop," Purdue Polytechnic Institute, West Lafayette, IN, USA. (August 3, 2015 - August 7, 2015).

CERTIFICATIONS

Human Research (1) Social Behavioral Research Investigators & Key Personnel, CITI/ IRB Training Jan 2016 - 2021 (2) Investigators and Research Personnel Conducting Exempt Research Only, CITI/ IRB Training Feb 2016 - 2021

Responsible Conduct of Research (1) RCR for Undergraduate Students CITI/ IRB Training Jan 2016 - 2021 (2) Social and Behavioral RCR Course 1, CITI/ IRB Training Jan 2016 - 2021

TEACHING EXPERIENCE

PURDUE UNIVERSITY, Human Centered Design and Development, CGT Department *July 2015 - Current*

CGT17207: Experience Studio I, Spring 2016

Developed active learning curriculum for Experience Studios which are a learn by doing industry sponsored collaborative.

Directed Student Learning

Faculty mentor for Design for America Chapter at Purdue, "Design for America," Patti & Rusty Rueff Dept Vis & Perf Arts. (February 20, 2016 - Present).

Advised: Jesse Palma

Faculty mentor for Tech 120, "Design of a Social Innovation." (January 11, 2016 - Present).

Advised: David Fisher, Xuemeng Wang, Aditya Harish

Faculty mentor for Tech 120, "Design of a Social Innovation." (January 11, 2016 - Present).

Advised: Max Enis, Quinyi Chen, Joseph Devo

Discovery Park Undergraduate Research Internship Program (DURI), "Education mobile application design for children with Autism Spectrum Disorder (ASD)," Computer Science. (January 11, 2016 - Present).

Advised: Zhizhe Zhang, Deeptanshu Malik

Supervised Teaching Activity, Computer Graphics Technology. (January 11, 2016 - Present).

Advised: Marlen Promann

Faculty advisor for CGT Capstone Project, "Development of Capstone Project Web Portal for PPI," Computer Graphics Technology. (January 11, 2016 - Present).

Advised: Kyle Rice, Ricardo Gonzalez, Abby Seifert, Chris Ronchi

Faculty advisor for CGT Capstone Project, "Health and Nutrition Technology (HNT) Mobile App Development," Computer Graphics Technology. (January 11, 2016 - Present).

Advised: Madeline Schenck, Ashley Alfano, Sopha Bounphisai, Gavin Brown

Supervised Research, "An Experimental Evaluation of Knowledge Management Software Systems to Improve User Experience," Computer Graphics Technology. (January 1, 2016 - Present).

Advised: Marlen Promann

Faculty advisor for CGT Capstone Project, "Literacy Labels: Emergent Literacy Application Design for Children with Autism development of rewards system," Computer Graphics Technology. (August 12, 2015 - December 12, 2015).

Advised: Kayla Gaskins, Douglas Gordon, Anthony Ramirez

TEACHING EXPERIENCE, cont.

PURDUE UNIVERSITY, Industrial/Interaction Design, Art & Design Department

First year: AD105: 2D Foundations, AD106: 3D Foundations, AD146: Design Drawing I (8x)

Second year: AD246: Design Drawing II (4x)

Third year: AD305: Industrial Design Studio I (2x), AD315: ID Methodology (6x), AD306: ID Studio II

Forth year: AD405 ID Studio III & AD415: Industrial Design Thesis (5x)

Graduate: AD512: Interaction Design Studies & Web Design

Directed Student Learning

Rose-Hulman Institute of Technology: Senior Capstone: "Development of SPEAKmore! mobile application prototype on the iPad." (Aug 2012 - May 2013) PI: Oliver Wendt

Rose-Hulman Institute of Technology: Senior Capstone: "Development of Literacy Labels mobile application prototype on the iPad." (Aug 2014 - May 2015) PI: Nancy Rasche

Directed Student Learning Awards

2014: IDEA Finalist: Sasha Mahan-Rudolph *Sprout: Restaurant High Chair*

2013: UC San Diego Student Business Venture Finalist: Jessica David *Golden Chef Oven Racks*

2013: IDEA Finalist: Sally Bleumke *Tag-Along: IV Pump and Storage System*

2012: IDEA Bronze: Arman Kirim *Fulcrum: Cane and Crutch Combo*

2012: IDEA Finalist: Jeremiah Etchinson *Lucid Force Umpire Helmet*

2012: IDEA Finalist: Brendan Joyce *Tridration: Bike Hydration System*

2012: IHA Student Competition - 2nd Place: Patrick Fiori *Heart Start Infant CPR Assistant*

2012: IHA Student Competition - 3rd Place: Elizabeth Reuter *PoshPaw Pet Nail Clippers*

2012: IHA Student Competition - Honorable Mention: Rich Beien *EDGE: Convertible Cane*

2011: IHA Student Competition - 3rd Place: Brendan Joyce *Garbage Disposal Safety System*

2010: IHA Student Competition - Honorable Mention: Chris Bernard *EcoGauge Power Control*

RESEARCH

PUBLISHED INTELLECTUAL CONTRIBUTIONS

Conference Proceedings

Rasche, N. J., Pourcho, J., Wei, S., Qian, Z. Y., Chen, Y. (2013). Literacy LABELS: emergent literacy application design for children with autism. ACM SIGGRAPH 2013 Posters (vol. 24, pp. 1). New York, NY, USA: ACM.

Rasche, N. J., Qian, Z. Y. (2012). Work in progress: Application design on touch screen mobile computers (TSMC) to improve autism instruction. In IEEE (Ed.), Frontiers in Education Conference (FIE), 2012 (IEEE Xplore Digital Library ed., vol. October 2012, pp. 1–2). IEEE Xplore Digital Library. <http://ieeexplore.ieee.org/xpls/icp.jsp?arnumber=6462516#article>

Other

Rasche, N., Wendt, O. (in press). In IMFAR: International Society for Autism Research (Ed.), Development of a Mobile Application for Early Literacy and Language Intervention in Children with Autism Spectrum Disorder (2016th ed.). IMFAR.

RESEARCH, cont.

Presentations Given

Rasche, N. J. (Presenter), Vorvoreanu, M. (Author & Presenter), Parsons, P. (Presenter), Gray, C. M. (Presenter), World Usability Day, "Innovation Through Subversive Design," User Experience Professional Association (UXPA), Indianapolis Indiana. (November 12, 2015).

CONTRACTS, GRANTS AND SPONSORED RESEARCH**Award**

Rasche, N. J. (Principal), Spark Lab Innovation Award, Purdue Honors College Exhibition. (AY 2016-2017).

Rasche, N. J. (Principal), Junior Fellow, Service-Learning Faculty Grant Program, Center for Instructional Excellence, Purdue University, \$2,000. (AY 2016-2017).

Rasche, N. J. (Principal), University Research Program (URP) Award, Sponsored by Ford Motor Company, Private, \$50,000.00. (February 15, 2016 - February 15, 2017).

OTHER**Copyright**

Literacy Labels through Purdue IP: Fall 2015 Filing # 1-2812013781 IP 2013-RASC-66492

News

The Exponent. "Purdue's new UX major gains popularity" April 29, 2016 by Subhisksha Raman. (article_0e3a311b-491a-52d4-809c-8a221f297347)

Purdue OTC News. Technology Snapshot: Computer Technology- Medical Newsletter. "Literacy LABELS: game may help autistic students learn to read" (PRF 66492)

Exhibitions

Rasche, N. J. (Curator) EXP: Experience Studio Show, KNOY Hall Lobby. (April 20-26, 2016).

Patents

Convertible furniture: JL Lawson, NJ Rasche, DM Turner, EM Apperson IV US Patent 6,679,571: 2004

Thermally insulated container: D Turner, A Mendenhall, P Zink, N Rasche US Patent App. 10/044,576: 2002

Accessory tray: DM Turner, N Rasche, A Mendenhall US Patent 6,298,793: 2001

Seat bottom: DM Turner, A Mendenhall, N Rasche US Patent D439,452: 2001

Seat back: DM Turner, A Mendenhall, N Rasche US Patent D438,734: 2001

Apparatus and method: CL Brown, DE Julian, NJ Rasche, GL Brown, SW Floyd US Patent 6,041,449: 2000

Seat back: DM Turner, A Mendenhall, N Rasche US Patent D434,252; D434,253; D433,855: 2000

SERVICE

COLLEGE SERVICE

Committee Member, Recruitment, Retention and Diversity Committee. (August 11, 2015 - Present).

Camps

TAGS "Technology Advances Girl Scouts." Taught 2 workshops. (July 23, 2015)

WOWit "Windows of Opportunity for Women In Technology." Taught 2 workshops. (Oct 31, 2015)

CLAIMit "Communicating Leadership and Advancing Innovation for Minorities in Technology." Taught 2 workshops. (Nov 14, 2015)

Recruiting

Purdue CGT Alumni Homecoming Celebration Booth (Nov 7, 2015)

TechExperience at Fishers High School (Nov 17, 2015) and Hamilton SouthEastern High School (Feb 9, 2016)