

# NANCYRASCHE

## ACADEMIC RESUME: PURDUE UNIVERSITY

CLINICAL ASSISTANT PROFESSOR  
HUMAN CENTERED DESIGN AND DEVELOPMENT  
PURDUE UNIVERSITY

### CONTACT

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### CAMPUS

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profile/nrasche  
*CGT17207 website:*  
engineering.purdue.edu/  
ExStudio

### EDUCATION

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**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/](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

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**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 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.

**Undergraduate Mentor:** Rose-Hulman Institute of Technology senior thesis group for the development of *Literacy Labels* application: Aug 2014 - May 2015

**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.**

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**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 catalytpdg.com Indianapolis, IN: May 1999 - May 2002  
*Product design and development consulting firm*

**DEVELOPMENT ACTIVITIES ATTENDED**

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**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**, "Purdue PLM Conference," Purdue PLM, Lafayette, IN, USA. (October 15, 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**

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**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

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**PURDUE UNIVERSITY, Human Centered Design and Development**, CGT Department *Jul 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**

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

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

Advised: David Fisher, Xuemeng Wang, Aditya Harish

Tech 120 Mentor, "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

Undergraduate 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

Undergraduate 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

Undergraduate 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.**

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**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**

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**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.**

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**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), "Nancy Rasche/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**

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

**Patents**

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

Thermally insulated container for juvenile stroller push handle: 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

Seat bottom: DM Turner, A Mendenhall, N Rasche US Patent D434,253: 2000

Apparatus and method for treating objectionable odors in toilet bowls and the like: 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: 2000

Seat back: DM Turner, A Mendenhall, N Rasche US Patent D434,253: 2000

Seat back: DM Turner, A Mendenhall, N Rasche US Patent D433,855: 2000

**SERVICE**

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**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)