### **NIGINI OLIVEIRA** Curriculum Vitae

HCI Applied Researcher & Social Software Engineer Seattle Area, WA https://nigini.me

### **PROFILE**

I am an Applied Human-Computer Interaction Researcher and Educator interested in online experimentation, decentralizing social computing, and how decolonial and cultural studies can support the design of more inclusive technology and diverse online environments. I am passionate about technology creation with a broad set of skills: from design to data science research methods, from coding software to mentoring co-learners in technology design.

### PROFESSIONAL EXPERIENCE

### 2023 - current **Research Engineer**

Paul G. Allen School of Computer Science and Engineering University of Washington (UW), WA, USA

I am creating the next generation of online research based on more than a decade of research with LabintheWild. I am focused on expanding LabintheWild toolkit to support researchers to minimize the <u>WEIRD bias</u> in scientific and technology design projects.

#### 2017 - 2022 **Postdoctoral Researcher**

Paul G. Allen School of Computer Science and Engineering University of Washington (UW), WA, USA

I worked on scaffolding the creation of large-scale online experiments aiming to minimize researchers' workload and promote volunteers engagement opportunities. I also research cross-cultural collaboration and design inclusive affordances for online communities.

#### 2015 - 2017 Research Assistant

Paul G. Allen School of Computer Science and Engineering University of Washington, WA, USA

I studied how culturally diverse users appropriate collaborative sites (e.g., StackOverflow) to match their needs and values and how the design of these sites favors some human values over others. I was also a software architect and researcher for Labinthewild.org.

#### 2013 - 2013 Research Assistant

Electrical and Computer Engineering Department University of British Columbia (UBC), BC, Canada

Developed a qualitative study to answer how users of social tagging systems (such as Delicious.com) understood tags to search and fulfill

their information needs.

### 2011 - 2012 Research Assistant

Departamento de Sistemas e Computação

Universidade Federal de Campina Grande (UFCG), Brazil

Worked as a researcher in the broad area of Collaborative Systems collaborating, for instance, in the Open Software and Crowdsourcing

platform now called PyBossa.

### 2009 - 2011 Software Architect, Team Leader, and Owner

UM Computational Solutions and Services Ltd., Brazil

I founded this company with two students to build personalized Informational Systems solutions for regional businesses in Northeast Brazil. We worked mainly with the Java Enterprise technology.

### 2007 - 2011 Undergraduate Lecturer

Faculdades Integradas de Patos (FIP), Brazil

I taught Information Systems Engineering courses like Web Development and Introduction to Programming and mentored research projects on building enterprise and social web software. I

also chaired the undergraduate degree for two years.

### **EDUCATION**

2012 – 2017 Universidade Federal de Campina Grande (UFCG), Brazil

Advised by Nazareno Andrade (UFCG) and Katharina Reinecke (UW)

Ph.D. in Computer Science

Cross-cultural HCI & Collaborative Systems

2000 – 2007 Universidade Federal de Campina Grande (UFCG), Brazil

B.Sc. & M.Sc. in Computer Science

Distributed Systems & Quantum Computation

#### **PUBLICATIONS**

## Do Cross-Cultural Differences in Visual Attention Patterns Affect Search Efficiency on Websites?

**Nigini Oliveira\***, Amanda Baughan\*, Tal August, Naomi Yamashita, and Katharina Reinecke (\*) *Joint first-authors* 

CHI'21 - Proceedings of the 2021 ACM Conference on Human Factors in Computing Systems. [DOI]

# Identifying with all humanity predicts cooperative health behaviors and helpful responding during COVID-19

Rodolfo C. Barragan\*, **Nigini Oliveira\***, Koosha Khalvati, Rechele Brooks, Katharina Reinecke, Rajesh P. N. Rao, and Andrew N. Meltzoff (\*) *Joint first-authors* PONE'21 - PLOS ONE Journal. 2021. [DOI]

# The Exchange in StackExchange: Divergences between Stack Overflow and its Culturally Diverse Participants

**Nigini Oliveira**, Michael Muller, Nazareno Andrade, and Katharina Reinecke CSCW'18 - Proceedings of the ACM on Human-Computer Interaction. 2018. [DOI]

# Framing Effect: Choice of Slogans Used to Advertise Online Experiments Can Boost Recruitment and Lead to Sample Biases

Tal August, **Nigini Oliveira**, Chenhao Tan, Noah A. Smith, and Katharina Reinecke CSCW'18 - Proceedings of the ACM on Human-Computer Interaction. 2018. [DOI]

### **Digestif: Promoting Science Communication in Online Experiments**

Eunice Jun, Blue Jo, **Nigini Oliveira**, and Katharina Reinecke CSCW'18 - Proceedings of the ACM on Human-Computer Interaction. 2018. [DOI]

### A Case for Design Localization: Diversity of Website Designs in 44 Countries

Manuel Nordhoff, Tal August, **Nigini Oliveira**, Katharina Reinecke CHI'18 - Proceedings of the 2018 ACM Conference on Human Factors in Computing Systems [DOI]

### **Citizen Science Opportunities in Volunteer-Based Online Experiments**

Nigini Oliveira, Eunice Jun, Katharina Reinecke CHI'17 - Proceedings of the 2017 ACM Conference on Human Factors in Computing Systems [DOI]

# Participation Differences in Q&A Sites Across Countries: Opportunities for Cultural Adaptation

**Nigini Oliveira**, Nazareno Andrade, Katharina Reinecke NordiCHI'16 - Proceedings of the 9th Nordic Conf. on Human-Computer Interaction [DOI]

# A case study of contributor behavior in Q&A site and tags: the importance of prominent profiles in community productivity

Adabriand Furtado, **Nigini Oliveira**, Nazareno Andrade 2014 - Journal of the Brazilian Computer Society [DOI]

### Contributor profiles, their dynamics, and their importance in five Q&A sites

Adabriand Furtado, Nazareno Andrade, **Nigini Oliveira**, Francisco Brasileiro

CSCW'13 - Proceedings of the 2013 ACM Conference on Computer Supported Cooperative Work and Social Computing [DOI]

## The SegHidro Experience: Using the Grid to Empower a Hydro-Meteorological Scientific Network

Eliane Araújo, Walfredo Cirne, Gustavo Wagner, **Nigini Oliveira**, Enio P. Souza, Carlos O. Galvão, Eduardo Sávio Martins

e-Science'05 - Proceedings of the 1st IEEE Conf. on e-Science and Grid Computing [DOI]

### OTHER PUBLICATIONS, POSTERS, DEMOS, WORKSHOPS

# [Workshop (Organizer)] Learning from Team and Group Diversity: Nurturing and Benefiting from our Heterogeneity

Michael Muller, Volker Wulf, Susan R Fussell, Ge Gao, Pamela J Hinds, **Nigini Oliveira**, Katharina Reinecke, Lionel Robert Jr, Kanya (Pao) Siangliulue, Chien-Wen Yuan CSCW '19 Workshop [URL]

### [Poster] Redesigning Question & Answer Sites to Engage Group-focused Participants

Nigini Oliveira, Lea Quan

CHI '19 Symposium - HCI Across Borders and Intersections [URL]

# [Demo] LabintheWild: How to Design Uncompensated, Feedback-driven Online Experiments

**Nigini Oliveira**, Eunice Jun, Trevor Croxson, Krzysztof Z. Gajos, Katharina Reinecke CSCW '17 - Companion of the 2017 ACM Conference on Computer Supported Cooperative Work and Social Computing [DOI]

#### [arXiv] Assessing the Value of Peer-Produced Information for Exploratory Search

Elizeu Santos-Neto, Flavio Figueiredo, **Nigini Oliveira**, Nazareno Andrade, Jussara Almeida, Matei Ripeanu

2015 - arXiv.org: Social and Information Networks [arXiv]

### [Doctoral Consortium] Culture-aware Q&A Environments

Nigini Oliveira

CSCW'15 - Companion of the 2015 ACM Conference on Computer Supported Cooperative Work and Social Computing [DOI]

#### **TEACHING**

2023	Undergraduate Courses (UW) Software Engineering (CS)
	Interaction Programming (CS)
2020	Graduate Courses (UW)
2020	Prototyping Studio (MHCI+D)
2019	Graduate Courses (UW)
2015	Usability/User Research (MHCI+D)
	Undergraduate Courses (UW)
	Introduction to Human-Computer Interaction (CS)
	Server-side Web Software Development (iSchool)
2018	Undergraduate Courses (UW)
	Introduction to Human-Computer Interaction (CS)
	Design Methods (iSchool)
2017	Teaching Assistant (Undergraduate - UW)
	Introduction to Human-Computer Interaction (CS)
2013	Teaching Assistant (Graduate - UFCG)
	Collaborative Systems
2012	Teaching Assistant (Undergraduate - UFCG)
	Introduction to Data Analysis
	Data Mining
	Neural Networks
	Introduction to Big Data Analysis
	Data Visualization
2011	Undergraduate Courses (FIP)
	Distributed Systems and Applications
	Agile Methods for Software Development
	Data Structures and Algorithms
	Web Software Development
2010	Undergraduate Courses (FIP)
	Distributed Systems and Applications
	Agile Methods for Software Development
	Enterprise Software Development
	Data Structures and Algorithms
	Introduction to Computer Programming
2009	Undergraduate Courses (FIP)
	Distributed Systems and Applications
	Object-Oriented Programming
	Agile Methods for Software Development
	Advanced Algorithms Practice
2000	Enterprise and Web Software Development
2008	Undergraduate Courses (FIP)
	Distributed Systems and Applications
	Object-Oriented Programming

Advanced Algorithms Practice

2007 Undergraduate Courses (FIP)

Distributed Systems and Applications

Object-Oriented Programming Design of Information Systems

2000-2004 Language School (CCAA)

Spanish for Brazilians

### **MENTORING**

2021-2023 Mentoring CS Masters Program Candidate (UW)

Yadi Wang

2020-2021 Mentoring CS Undergrad Research Assistant (UW)

Benjamin Brusniak

2020 Mentored CS Undergrad Research Assistant (UW)

Maria Tracy

2018 Mentored CS Summer Undergrad Research Assistant (UW)

Lea Quan (Funded by my Postdoc Research Award)

2017 **Co-mentored 1st year CS PhD student** 

Tal August

2016 **Co-mentored 1st year CS PhD student** 

Eunice Jun

2009 **Supervised Bachelor Theses** 

Arthur Lucena de Pereira

Emanuell Faustino Henrique de Lucena

Paulo Ewerton Gomes Fragoso

2008 **Supervised Bachelor Theses** 

Ana Paula Félix de Oliveira Ítalo Herbert Siqueira Gabriel José Jalmir de Medeiros Júnior Luciano Celestino de Oliveira Wendell Campos Veras

### **SERVICE**

2024	DWEB Camp 2024 (	Organizer Volunteer	(coming)
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MHCID Prototyping Studio Critique Crew

2023 DWEB Camp 2023 Organizer Volunteer

2022 ICTD 2022 Congerence Reviewer

ECSCW 2022 Conference Reviewer

2021 ACM CHI 2022 Conference Reviewer

ACM GROUP 2022 Conference Reviewer

2020 ACM CHI 2021 Conference Reviewer

	ACM CSCW 2020 Conference Reviewer
2019	ACM CSCW 2019 Associate Chair
	ACM CHI 2020 Associate Chair
2018	ACM CHI 2019 Associate Chair
	SBC IHC 2018 Program Committee
	ACM CSCW 2018 Conference Reviewer
	AIS ECIS 2018 Conference Reviewer
2017	AAAI HCOMP 2017 Conference Reviewer
	AAAI ICWSM 2017 Conference Reviewer
	ACM CHI 2018 Conference Reviewer
2016	ACM CSCW 2017 Conference Reviewer
	ACM CHI 2017 Conference Reviewer
	ACM NordiCHI 2016 Conference Reviewer

### **TALKS**

2021

2020 Re-designing online social platforms to include culturally diverse people.

@ Western Washington University

Department of Computer Science, Bellingham, WA, USA

2019 Re-designing online social platforms to include culturally diverse people.

@ University of St Andrews

School of Computer Science, St Andrews, Scotland

@ Universidade Federal de Campina Grande

Laboratório de Sistemas Distribuídos, Campina Grande, Brazil

@ Universidade Federal Fluminense

Instituto de Computação, Niterói, Brazil @ Universidade Federal de Minas Gerais

Departamento de Ciência da Computação, Belo Horizonte, Brazil

@ IBM Research

São Paulo & Rio de Janeiro, Brazil

@ Rochester Institute of Technology

Golisano College of Computing and Information Sciences,

Rochester, NY, USA

### COMPLEMENTARY EDUCATION

2022 Improving Deep Neural Networks with Andrew Ng - Coursera

Neural Networks and Deep Learning

with Andrew Ng - Coursera

2017 **Design Principles: an Introduction** 

**Human-Centered Design: an Introduction** 

**Social Computing** 

	with Scott Klemmer - Coursera
2016	Design Inquiry and Methods in Information Sciences
	with David Hendry - Observer at the University of Washington
2016	Value-sensitive Design
	with Batya Friedman - Observer at the University of Washington
2015	Model Thinking
	with Scott Page - Coursera
2014	Questionnaire Design for Social Survey
	with F. Conrad and F. Kreuter - Coursera
2013	Social Network Analysis
	with Lada Adamic - Coursera
2012	Data Analytics
	Training program - UFCG in cooperation with Hewlett-Packard Brazil
2011	Machine Learning
	with Andrew Ng - pre-Coursera
2011	Towards a Literacy of Cooperation
	with Howard Rheingold - Online Course

### **SKILLS**

Technology Design I have been involved with projects that use design research

methods where I learned techniques to bridge the gap between identifying problems and building technology to tackle them. For instance, I'm now using iterative prototyping and user testing to re-think the Question & Answer collaboration model to promote

group-focused interactions.

Communication I have prepared and given talks since a young age when part of and Lecturing skills

the Rotary/Interact service community. I also lectured

Information System Engineering and Design Methods courses, totaling a decade of classroom experience. I have strengthened these skills by continually presenting my work and ideas to

academic and industry peers.

Managerial skills I have experience with managing small and medium-sized teams

> as I owned and led the development team in a software startup and chaired the Information Systems undergraduate program academic activities. As a postdoctoral researcher, I conduct projects with graduate and undergraduate students in a large

Computer Science School in the United States.

Mixed-methods I conducted and participated in a series of research projects that Research

involved both quantitative and qualitative data collection and analysis. This was the case of my doctoral work which evaluated cross-cultural engagement differences in online Question & Answer sites and my current research project on defining innovative ways to support the design of robust and engaging

volunteer-based online experiments.

Data Science I have experience in statistics, data analysis, and machine

> learning methods. I acquired this knowledge via courses and research projects, leading to published work as the analysis of user-profiles in Questions & Answer sites via clustering

algorithms. I am currently studying Deep Learning methods.

Software I have practiced and lectured about the architecture, Engineering

development, and maintenance of Information Systems and Web Software. I used diverse techniques and technologies ranging from Design patterns, Test-driven development, Java

Enterprise Edition, and Python.

Teamwork I have a particular interest in working in teams. I have been

involved with research and technology development projects

both in academic and small businesses environment.

### Intercultural skills

I'm Brazilian and lived in Mexico for one year as an exchange student. My experience was considerably extended through research projects conducted for extended periods in Canada and the United States. I also traveled for leisure and work in various countries in Europe and South America. Living in Seattle, WA, I have daily encounters with a very diverse crowd of colleagues and friends.

### **LANGUAGES**

Mother tongue: Portuguese

Other languages	UNDERSTANDING		SPEAKING		WRITING	
	Listening	Reading	Spoken interaction	Spoken production		
English	C2	C2	C2	C1	C1	
Spanish	C1	C2	C1	C1	B2	
Chinese	Just started but I am very excited about it.					

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2: Proficient user

Common European Framework of Reference for Languages