

LAURA CORTÉS-RICO

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EDUCATION

Ph.D. Student in Information Science

Cornell University, Ithaca, NY-USA 2028 (expected)

M.Sc. in Systems and Computing Engineering [Cum Laude]

GPA: 4.65/5.00

Pontificia Universidad Javeriana, Bogotá-COL Oct. 2015

Dissertation Project: ApTUI-Framework for the participatory design of tangible interactions
[Honor Mention]

Electronics Engineer

GPA: 4.5/5.0

Universidad Nacional de Colombia, Bogotá-COL Jul. 2010

Final Project: Design, implementation and evaluation of a multipurpose, open-source, development platform with an educational focus.

TEACHING EXPERIENCE

Assistant Professor

Universidad Militar Nueva Granada - Cajicá-COL 2017 - 2023

Courses Taught at Multimedia Engineering undergraduate program (Average Student Evaluations of Teaching 98/100):

Physical Computing (2021-2022); Artificial Intelligence (2017-2019, 2022); Digital Signal Processing (2017-2019); Computer Programming (2017); Computer Graphics Introduction (2020); Internet of Things (2019-2020); Interactive Objects and Environments (2020)

Multimedia Engineering Academic Director (Jul. 2021 - Jul. 2023)

Coordinated Multimedia Engineering undergraduate program, with 459 active students, 45 alumni and 23 professors.

Research Center Academic Director (Jan. 2020 - Jul. 2021)

Supported the administrative and academic execution of research and innovation projects at the College of Engineering *Campus Cajicá*. Achieved the recognition and categorization of 3 new research groups by the Ministry of Science, Technology and Innovation of Colombia.

Part-time Lecturer

Politécnico Grancolombiano - Bogotá-COL 2012 - 2021

Universidad Distrital Francisco José de Caldas - Bogotá-COL 2016 - 2017

Pontificia Universidad Javeriana - Bogotá-COL 2012 - 2017

WORK EXPERIENCE

CTO & Co-Founder at *Picolab - Bogotá-COL*

2012 - Present

Engineering interactive experiences for science museums, experiential marketing, non-formal educational contexts, among others. Leading proposals and projects in the area of information and communication technologies. Developing mobile, web and standalone applications.

External research consultant at Mending the New - Bogotá-COL 2019 - 2020

Codesigned the web application “*Archivo Digital de Textiles Testimoniales*”. Co-wrote academic papers for the conferences CLIHC 2019, NORDES 2019 and PDC 2020. Participated in participatory design workshops and research through design activities, in the conception of “Time(s) to Listen”

Research Assistant at *Bordando el Conocimiento Propio Bogotá-COL* 2014

Built CalaITU, a digital-textile platform to design embroidery patterns. Co-wrote academic papers for the journal “Engineering Studies”, and the conference Interact 2015. Interviewed stakeholders and systematized fieldwork information to propose technical requirements to CalaITU.

Digital Coordinator at *e-motion Digital - Bogotá-COL* 2012 - 2013

Developer & Tutor at *Maloka - Bogotá-COL* 2008 - 2012

RESEARCH INTERESTS

Human-Centered Design and Engineering: Social Computing, Digital Technology and Social Justice, Participatory Design, Research through Design; **Human Computer-Interaction:** Embodied, Tangible, Textile, Physical Interactions.

SELECTED PUBLICATIONS

(*Journal*) González Rivera, R. A., Cortés-Rico, L., Pérez-Bustos, T., & Franco-Avellaneda, M. (2016). Embroidering engineering: A case of embodied learning and design of a tangible user interface. *Engineering Studies*, 8(1), 48–65. <https://doi.org/10.1080/19378629.2016.1170839>

(*Magazine Article*) Cortés-Rico, L. (2021). Hand in hand: A situated reflection about knowledge mobilization between textile and digital. *Interactions*, 28(2), 42–47. <https://doi.org/10.1145/3449784>

(*Conference Papers*) Strohmayer, A., Cortés-Rico, L., Pérez-Bustos, T., Psarra, A., Rosner, D., Subasi, Ö., Posch, I., Nabil, S., & Sherman, J. (2022). Justice-oriented Participatory Electronic Textile Making: Fostering shared spaces of knowledge dialogues through the process of making, un-making, and re-making justice-oriented participatory praxis. *Proceedings of the Participatory Design Conference 2022 - Volume 2*, 259–262. <https://doi.org/10.1145/3537797.3537880>

Complete list of publications at Google Scholar Profile:
<https://scholar.google.com/citations?hl=en&user=swoK-bMAAAAJ>

GRANTS AND AWARDS

Scholarships and academic awards

2022. Fulbright-MinCiencias Scholarship, Doctoral Studies 2023

2015. Cum Laude Master’s degree.

2014-2015. Juan Pablo Gutiérrez Cáceres Scholarship for master students.

Selected grants

2021-2022. CI “Definition of a model to support medical communication in the surgical planning of discharge cases complexity, supported by collaboration tools and 3D immersion”. Code IMP-ING-3407 Funded by *Universidad Militar Nueva Granada* and *Clínica Shaio* - \$88.837.

2019-2020. CI “Nanoscale functionalized fine bubble diffusers: Study of their useful life and oxygen transfer in activated sludge processes”, Code IMP-ING-2930 Funded by *Universidad Militar Nueva Granada* - \$162.740.

2019. PI “Knowledge dialogue in the creation of crafted interfaces for the interaction with mobile devices”, Code INV-ING-2981 Funded by *Universidad Militar Nueva Granada* - \$39.590.

2015-2016. Technical Director - Picolab. “GPStories, Gamification in museums”, Code 6155-680-47725. Funded by COLCIENCIAS and MinTIC, for the call 680-2014 - \$69.800.

Other awards

2020. Honor Mention “Artful Integrators Award - Participatory Design Conference 2020” with the project “Mending the New: A Framework for Reconciliation Through Testimonial Digital Textiles in the Transition to Post-Conflict Rural Colombia.”

2012. First place “*Premios Incluir*” in the category “Software and Applications”, from the Foundation *Saldarriaga Concha*, *MinTIC* and *Colnodo*. Proposal “*Audiocity*. An audio-game for people in the situation of visual disability.”

EXTRACURRICULAR & VOLUNTEER

Co-founder of *Artesanal Tecnológica* (2018 - Present).

Civic Engagement at Kent Habitat Construction Site (Summer 2023)

Volunteer at Science Clubs Colombia as a tutor (2017). **Volunteer** at “*Chicas STEAM*” as a mentor (2021).

Crafting and sports Embroidery, crochet and knitting. Rock climber novice. PADI Diver - Advanced Open Water Diver.