

HIGHLIGHTS

- Science administrator and Principal for large collaborative research initiatives and systems
 - Research scientist with over 9 years of both fundamental and applied research experience
 - Instructor of record for human computer interaction and developmental neuroscience courses
 - Co-founder and President of an education-based community empowerment organization
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RELEVANT EXPERIENCE

Principal, Product Development, Databrary

New York University (July 2019 – Present)

Databrary is a secure web-based data library for researchers to store, manage, share, discover, and reuse research data with a focus on video. It is unique in allowing both uploading of research data as well as authorized investigator access to datasets containing personally identifying information. Datavyu is a video coding and data visualization tool that facilitates data coding and sharing through the ongoing Databrary data library project.

My primary function is to increase adoption of both platforms by the larger research community; aided by my established connections in multiple research fields (HCI, AI, ML, neuroscience, and psychology).

My responsibilities include:

- Evaluating the current system and identifying areas of improvement and additional investment
- Surveying and interviewing existing users and conducting outreach to potential users
- Defining the complete revamp of the product and creating additional features to:
 - Incentivize sharing while enhancing protections for primary investigators and authorship
 - Separate participant data from project metadata and provide nuanced sharing controls
 - Drag and drop controls with automatic parsing of participant data to create metadata
 - Richer search features with deeper indexing and visually descriptive search results
 - Improve existing collaboration tools by creating project/lab groups and tiered roles
- Prioritizing features and end-to-end management of the roadmap and release

Science Administrator, The PLAY Project

New York University (December 2018 – Present)

The PLAY (Play & Learning Across a Year) Project is a collaborative, video-intensive research initiative by 66 labs from 45 universities. It serves as a model system for doing developmental science using a big-data approach.

My role involves the coordination and oversight of all research and video data collection from each entity. I designed and developed a niche web-based app to bring structure to and manage key parts of the workflow.

My responsibilities include:

- Rigorous training and onboarding of research labs and human subject research compliance
- Coordinating data collection and coding from over 900 families across US and Canada
 - 30 collecting labs record 2 hours of in-home video data per family (babies and mothers)
 - Each dataset is coded for developmental behaviors of interest (e.g., object perception and locomotion) by 4 other coding labs
 - The PLAY team performs quality assurance and reliability checks on the videos and coding
 - The distributed coding files are collated and reattached to each original video
- Disseminating prepared ready-to-use datasets to authorized investigators from the PLAY project and subsequently to the larger research community

Research Scientist, Psychological and Brain Sciences**Indiana University (April 2013 – July 2019)**

As a research scientist in the Cognitive Development Lab, my focus was on advancing current understanding of how early perception shapes cognitive development using cutting edge laboratory and natural experiment techniques. The input available to the visual system serves as a training dataset for the human brain to develop visual processes much like machine learning models.

In this role, I:

- Incrementally developed a strong research program by advancing ongoing research
- Collaborated with researchers from neuroscience, machine learning, and computer vision
- Published over 15 peer-reviewed articles in high impact journals
- Supervised graduate and undergraduate student research

Co-founder and President, Pudiyador**(January 2005 – Present)**

Pudiyador is an education-based community empowerment organization that uses a cradle-to-college approach to transform impoverished urban communities in southern India.

At Pudiyador, I work on our mission to give every person the opportunity to overcome the negative forces of poverty. I lead a fantastic team and work with outstanding partners to find sustainable ways to improve the wellbeing of all members of our communities while preserving their dignity.

Some key achievements are:

- Co-founded, built and operationalized a 33-employee organization serving 8 communities
 - Built a multi-center community empowerment organization from a backyard program
 - Formed an umbrella organization with centralized operations
 - Assembled the board and the core team; hired and trained the ground team
 - Set up a 501(c)3 organization in the US to broaden outreach and facilitate foreign contributions
 - Restructured the organization to match growth and to work effectively with an offshore team
 - Scaled operations from a founder-funded \$5k budget to a \$100k annual budget with a dedicated donor network that includes funding agencies, recurring individual donors and corporate donors
- Enabled the transformation of the lives of over 800 children and 1200 families by designing and establishing:
 - Educational and nutritional programs to support early childhood development: School Bridge (for 3-5 year olds), Children's Program (flagship program for 5-11 year olds), Early Teens program (project-based learning for 12-15 year olds)
 - Women's health and empowerment programs: Cradle health (for expectant/new mothers and their infants), women's empowerment (skills training, confidence building)
 - Community development programs: Youth Advancement (computer education, resume building), adult workshops (de-addiction programs, awareness workshops), teacher training and hiring from within our communities for sustainable employment opportunities
- Intentionally cultivated a culture of empathy and trust within the team, and collaborative and respectful relationships with our communities and partner organizations
 - High employee satisfaction and minimal employee attrition rates over a 15-year period
 - Created meaningful and lasting bonds with community members by involving them in program design and inviting them to be an integral part of our feedback loop
 - Forged long-term relationships with donor and partner organizations

ADDITIONAL EXPERIENCE

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| Postdoctoral Fellow , Psychological and Brain Sciences, Indiana University | 2011 – 2013 |
| Instructor of Record , Psychological and Brain Sciences, Indiana University | 2011 – 2017 |
| Graduate Instructor , Industrial and Operations Engineering, Univ. of Michigan | 2009 – 2010 |
| Graduate Research Assistant , Industrial and Operations Engineering, Univ. of Michigan | 2005 – 2010 |

EDUCATION

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| Ph.D. , Industrial and Operations Engineering (Cognitive Ergonomics) University of Michigan, Ann Arbor, MI <i>Dissertation: Supporting Monitoring and Interruption Management In Complex Domains Through Graded Multimodal Notifications</i> | 2011 |
| M.S. , Industrial and Operations Engineering (Cognitive Ergonomics) University of Michigan, Ann Arbor, MI | 2006 |
| M.S. , Information (Human-Computer Interaction) University of Michigan, Ann Arbor, MI | 2006 |
| P.G.D. , Computer Science University of Madras, Chennai, India | 2003 |
| B.A. , Economics University of Madras, Chennai, India | 2002 |

References available on request.