

# Deepak Varuvel Dennison

[ddeepak95.com](https://ddeepak95.com) | [dv292@cornell.edu](mailto:dv292@cornell.edu)

## Research Interests

My research is focused on **developing and evaluating culturally-aware AI technologies** for high-impact areas such as education. Broadly, I am interested in **Human-Computer Interaction, Human-AI Interaction, Responsible AI, Learning Sciences, and ICT for Development.**

## Education

<b>Cornell University</b> , PhD in Information Science	Aug'24 - Present
<b>Stanford University</b> , MS Learning Design and Technology	Aug'22 - Aug'23
<b>Ashoka University</b> , PG Diploma in Liberal Studies	Jun'17 - Jun'18
<b>SSN College of Engineering</b> , BE Biomedical Engineering	Jun'12 - May'16

## Ongoing Research Projects

### Evaluation of Cultural Alignment of Indic-LLMs

*Cornell University & Microsoft Research*

- Conducting a quantitative study to assess the cultural alignment of Indic LLMs across various Indian languages and their correspondence with Indian cultural values.

### Evaluation of Shiksha Copilot: An AI-tool for Lesson Content Generation

*Cornell University & Microsoft Research*

- Designed and executed a large-scale mixed-methods study to assess the effectiveness and impact of Shiksha Copilot, an AI tool for generating learning content for Indian school teachers.

## Experience

**Research Assistant**, Stanford University Jun'23 - May'24

- Collaborated with Professors Dorrotya Demszky and Victor Lee to build the educational tools leveraging AI technologies for supporting teachers and students in their classroom teaching/learning processes.
- Built the AI-Feedback feature for Code In Place, a large-scale human-centered coding course offered by Stanford, to provide automated feedback to section leaders and students leading to improvement in learning outcomes.
- Developed a web-based learning tool to empower students to utilize Large Language Models critically and effectively in their writing processes.

**Operations & Technology Manager**, Infant Jesus Matric Hr Sec School Jul'18 - Jul'22

- Handled and optimized the operations of a K-12 school with 1200 students by integrating technology-enabled processes.
- Received several awards for designing and implementing initiatives for nurturing maker culture and improving reading ability among students across India.

**UI/UX Designer**, Zoho Corporation Jun'16 - Jun'17

- Designed user-centric interfaces for an IT-helpdesk software that caters to around 100,000+ teams worldwide.

## Publications

### From Consumers to Critical Users: Prompt, an AI Literacy Tool For High School Students[🔗]

Deepak Varuvel Dennison, Raycelle C C Garcia, Parth Sarin, Jacob Wolf, Christine Bywater, Benjamin Xie and Victor Lee

*The Thirty-Eighth AAAI Conference on Artificial Intelligence (AAAI-24)*

### Co-designing AI Education Curriculum with Cross-Disciplinary High School Teachers[🔗]

Benjamin Xie, Parth Sarin,\* Jacob Wolf,\* Raycelle C. C. Garcia, Victoria Delaney, Isabel Sieh, Anika Fuloria, Deepak Varuvel Dennison, Christine Bywater, Victor R. Lee

*The Thirty-Eighth AAAI Conference on Artificial Intelligence (AAAI-24)*

### Evaluating LLMs' Generation of Growth-Mindset Supportive Teacher Language[🔗]

Margarett Clapper, Cameron Hecht, Michaela Jones, Nirel Jonesmitchell, Meghann Johnson, Deepak Varuvel Dennison, Dorrotya Demsky and David Yeager

*AIED2023 Workshop: Equity, Diversity, and Inclusion in Educational Technology Research and Development*

## Awards

GSE Fellowship, Stanford University	2023
UNLEASH Plus Finalist, UNLEASH	2022
Winners - Open Innovation Challenge, Government of Tamil Nadu	2022
Winners - Youth for Earth, The Climate Reality Project	2021
Star Educator 2020 - Excellence in Digital Innovation, Learning Matter	2020
Mother Teresa Fellow, Center for Social Impact & Philanthropy, Ashoka University	2019
Torchbearer, Young India Fellowship, Ashoka University	2018
Academic Top Rank Holder, Anna University	2016

## Media Features

### EducationWeek[🔗]

*"AI Can Make Education More Personal (Yes, Really)"*

### Freethink[🔗]

*"Stanford study finds AI improves the performance of teachers and students"*

### ABC7 News[🔗]

*"How will AI be taught in classrooms? These Bay Area teachers are integrating it into lessons"*

### The Hindu[🔗]

*"Chennai Corporation's vaccination portal gets a good response"*

### The Indian Express[🔗]

*"TN polls: Global Shapers Chennai Hub comes up with website to help voters make informed decisions before voting"*

## Technical Skills

- **Web Development:** Next.js, React, Streamlit, Firebase
- **Scripting & Automation:** Python, Node.js, Appscript, AWS Lambda
- **UI/UX Design:** Figma, Adobe XD, Balsamiq
- **Prototyping:** Lasercutting, 3D Printing, Raspberry Pi, Arduino
- **Content Creation:** Photoshop, Illustrator, InDesign, Premiere Pro, After Effects, Audition, LaTeX

## Other Selected Projects

**CESTA Digital Anthology, Stanford University, Software Architect** Jan'24 - May'24

- Designed and developed the CESTA Digital Anthology System from scratch to facilitate the publication of Stanford Center for Spatial and Textual Analysis's scientific works by both faculty and students.
- Architected a Quarto-based system integrated with GitHub and designed processes that enable both technical and non-technical authors to contribute to the anthology.

**GCC COVID-19 Vaccination Portal, UI/UX Lead** Jun'21 - Aug'21

- Designed the COVID-19 vaccination appointment portal of Greater Chennai Corporation in partnership with the state government.
- The portal facilitated over 2,19,000 vaccinations and was awarded by the government for its effectiveness and ease of use.

**Election Promises, Tech & Design Lead** Feb'21 - May'21

- Developed a platform that allowed voters to compare party promises and candidate information during the Tamil Nadu 2021 Legislative Assembly Elections, facilitating informed voting choices.
- Designed marketing creatives and assisted in content translation from English to Tamil and vice versa. The platform reached 12 million+ views and was widely acclaimed.

## Service

**Reviewer, ACM CHI** 2024-2025

**Research Consultant, Pratham Education Foundation** 2023-2024

**Organizer, GSE Design Collective, Stanford University** 2022-2023

**Impact Officer, Global Shapers Hub - Chennai, World Economic Forum** 2020-2021