Vikram Kamath Cannanure

HCI AND ICTD RESEARCHER · PROGRAMMER

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Education

Carnegie Mellon University — *Pittsburgh, USA*
PhD, HUMAN COMPUTER INTERACTION — *2017–present*
- Advisors: Prof. Tim Brown and Prof. Amy Ogan
- Research: Human centered systems to improve health care and education in developing countries.

Carnegie Mellon University — *Pittsburgh, USA*
MASTERS, EDUCATIONAL TECHNOLOGY AND APPLIED LEARNING SCIENCE — *2014–2015*

National Institute of Technology Karnataka — *Karnataka, India*
BACHELOR OF TECHNOLOGY, MECHANICAL ENGINEERING — *2007–2011*

Awards

2019	**PhD Fellowship**, Center for Machine Learning and Health	*Pittsburgh PA*
2019	**Best Paper Award**, ACM COMPASS Paper	*Accra, Ghana*
2019	**Poster Spotlight**, ACM COMPASS Poster	*Accra, Ghana*

Research Experience

United Nations University Computing and Society — *Macau, SAR, China*
RESEARCH INTERN — *July 2017 – Sept 2017*
- Advisor: Dr. Mamello Thinayne
- Interned at the Small data lab to learn about ICTD
- Conducted participatory design with a local NGO (Caritas Macau)
- Built a mobile app to report and monitor homelessness in Macau

Carnegie Mellon University — *Pittsburgh, USA*
SENIOR WEB DEVELOPER — *July 2015 – June 2017*
- Advisor: Prof. Geoff Gordon
- Building and maintaining Educational Technology to improve online learning
- Prototyping low cost video recording system for teaching courses

Carnegie Mellon University — *Pittsburgh, USA*
RESEARCH ASSISTANT — *Aug. 2015 - June. 2017*
- Advisor: Prof. Jen Mankoff
- Longitudinal Eating Detection: Deployed and evaluated the system to 12 users in the field. CoAdvisor: Prof. Edison Thomaz
- Twist n Knock: A One-Handed Gesture for smart watches: publication at GI 2016
- EDigs: Built and maintained the APIs for apartment hunting website in Pittsburgh.

Professional Experience

TeliportMe Inc: Indian startup — *Karnataka, IN*
WEB ARCHITECT — *Jul 2011- Aug 2014*
- Engineered APIs for Android, iOS, Web and Google Glass
- Scaled back-end to handle 4 million users and mange 100K locations
- Designed 3D viewer on par with Google street view
- Managed 10 Ubuntu machines with MySQL and Redis replication

Publications

[22] **Cannanure V.K.**, Gamage D. , Wong-Villacres, M., Sturm C., Kumar, N, *Workshop: Decolonizing HCI Across Borders*. CHI '20, Apr 2021, Yokohama, Japan.

[21] **Cannanure V.K.**, Bigwi. J, Umutesi. G, Mukamisha J.,Souvenir J., Ogan A, Brown T. *Designing a simple health information system for Women in Rwanda*. From Needs to Strengths: Operationalizing an Assets-Based Design of Technology: CSCW Workshop 2020,

[20] **Cannanure V.K.**, Brown T., Ogan A. *DIA: A Human AI Hybrid Chatbot for Low Resource Contexts*. ICTD 2020, Guayaquil, Ecuador

[19] **Cannanure V.K.**, Souvenir J., Adji Y. , Apke H., Jasinska K., Brown T., Ogan A. *"I'm fine where I am, but I want to do more": Exploring Teacher Aspirations in Rural Cote D'Ivoire*. ACM COMPASS 2020, Guayaquil, Ecuador

[18] Ávila E., Greenholt M. , Adji Y., **Cannanure V.K.**, Brown T., Ogan A. *Designing a Human Centred Chatbot to Mentor Teachers in Developing Contexts:*. AI and Social Good Symposium CMU, Pittsburgh, USA

[17] Ávila E., Greenholt M. , Adji Y., **Cannanure V.K.**, Brown T., Ogan A. *Designing a Human Centred Chatbot to Mentor Teachers in Developing Contexts:*. HCI Across Borders and Sustainable Development Goals: HCIxB CHI Workshop '20, Apr 2020, Hawaii, USA

[16] Kumar, N, **Cannanure V.K.**, Gamage D. , Prabhakar A., Sturm C. *Workshop: HCI Across Borders and Sustainable Development Goals*. CHI '20, Apr 2020, Hawaii, USA

[15] Madaio, M., Yarzebinski, E., **Cannanure V.K.**, Zinszer B., Seri, A., Tanoh, F., Hannon-Cropp, J., Cassell, J., Jasinska, K. Ogan, A. *Collective Support and Independent Learning with a Voice-Based Literacy Technology in Rural Communities.* . CHI '20, Apr 2020, Hawaii, USA

[14] **Cannanure V.K.**, Madaio, M., Yarzebinski, E., Ogan, A, Brown T. *Using Graphical Models to Understand Usage of an Educational Interactive Voice Response System*. COMPASS '19, Jun 2019, Accra, Ghana [Poster]

[13] Madaio, M., **Cannanure V.K.**, Yarzebinski, E., Zasacky, S., Tanoh, F., Hannon-Cropp, J., Cassell, J., Jasinska, K. Ogan, A. *"You Give a Little of Yourself": Family Support for Children's Use of an IVR Literacy System.*. COMPASS '19, Jun 2019, Accra, Ghana

[12] **Cannanure V.K.** *Phone Based Systems to Support Maternal Mental Health in Rwanda*. ICTDX '19 Doctoral consortium, Janurary 2019, Ahmedabad, India.

[11] **Cannanure V.K.**, Bigwi. J, Umuziga P, Gishoma D., Hynie M., Brown T. *Mobile Screening Tool for Educating Caregivers about Maternal Mental Health in Rwanda*. ICTDX '19, Janurary 2019, Ahmedabad, India. [Demo]

[10] **Cannanure V.K.**, Brown T, *RASP-IVR: A Low Cost Interactive Voice Response System*. AfriCHI '18, December 2018, Windhoek, Namibia.

[9] **Cannanure V.K.**,Nagashima T.,Gordon G., Brown T. *QnA: a low-cost system for developing interactive OER in computer science* OpenEd 18, Niagra falls, USA [Demo]

[8] **Cannanure V.K.**, Brown T, *Voice Based Social Network for Maternal Mental Health Awareness in Rwanda*. HCI Across Borders Workshop (CHI 2018), Montreal, Canada.

[7] Onafuwa, D., Early, K., Vyas N, **Cannanure V.K.**, Mankoff J. *Understanding the Information Needs of Prospective Tenants*. ACM SIGCAS Conference on Computing and Sustainable Societies (COMPASS 2018), June 2018, San Francisco, USA.

[6] Bhat, K.*, Thinayane M.*, Goldkind L., **Cannanure V.K.** *Critical Participatory Design: Reflections on engagement and empowerment in a case of a Community Based Organization*. Participatory Design Conference (PDC 2018), August 2018, Hasselt and Genk, Belgium.

[5] **Cannanure V.K.**, Gordon G. *TelKart and QnA: An Open Teaching System for Computer Science Courses*. Open Education Global Conference 2017, (OEC 2017), Cape Town South Africa [Poster]

[4] **Cannanure V.K.**, Mankoff J., *Watch-Ya-Doin*. 2nd Integrative Conference on Technology, Social Media, and Behavioral Health 2017, November 2016, Pittsburgh PA [Poster]

[3] **Cannanure V.K.**, Chen, X., Mankoff J., *Twist and Knock A One-Handed Gesture for Smart Watches*. Proceedings of the 42nd Graphics Interface Conference (GI 2016)

[2] **Cannanure V.K.,** Ramaswamy N, Karanth N, Desai V, Kulkarni S.M., *"Development of an Automated Handwriting Analysis System".* ARPN Journal of Engineering and Applied Sciences vol 6. No. 9, Sept 2011

[1] Ramaswamy N, **Cannanure V.K.,**Karanth N, Desai V, Kulkarni S.M. *The Effect of Deviation in Nozzle Diameter on the Pressure Loss Coefficients of Diffuser in a Valveless Micropump.* International Journal of Electronics and Computers, published by International Science Press, Vol. 3, No. 1 Jan.-June 2011

Professional Service

2021	**Organizer**, HCI Across Borders (HCIxB) symposium at CHI	*Yokohama, Japan*
2020-	**SIGCHI Development Fund**, Executive Committee	
2020-	**AC**, CHI 20 (extended abstract)	
2020	**Organizer**, HCI Across Borders (HCIxB) symposium at CHI	*Hawaii, USA*
2019	**Organizer**, HCI Across Borders (HCIxB) symposium at CHI	*Glasgow, UK*
2019	**Organizer**, Young Researchers reception ICTDx	*Ahmedabad*
2018-	**Reviewer**, ACM COMPASS 2021, CSCW 2021, CHI 2021, CHI 21 (case studies), CSCW 20, CHI 20 (case studies), CHI 19, HCIxB 2019, DIS 18 (WiP), PDC 18(Notes)	

Mentoring

Masters

Baptiste Moreau-Pernet: CMU Pittsburgh, METALS 2021: *Teacher Training Project in Ivory Coast*
Saumya Sharma: CMU Pittsburgh, MSIIPM 2020: *Simple Health Information System*
Lucie Uwimpaye: CMU Africa, MSIT 2021: *Simple Health Information System*
Eloísa Ávila: CMU Pittsburgh, MSPPM 2021: *Teacher Training Project in Ivory Coast*
Sheila Mbadi: CMU Africa, MSIT 2021: *Simple Health Information System*
Patrick Manirakiza: CMU Africa, MSECE 2019: *MnE system for Rwanda Women's Network*
Solange Iyubu:CMU Africa, MSECE 2019: *MnE system for Rwanda Women's Network*
Sabin Sheja: CMU Africa, MSECE 2019: *MnE system for Rwanda Women's Network*
Justin Bigwi: CMU Africa, MSECE 2019: *Design of a Phone Call-Based Health Information System*
Gloria Umutesi: CMU Africa, MSECE 2020: *Design of a Phone Call-Based Health Information System*
Jocelyne Mukamisha CMU Africa, MSIT 2020: *Design of a Phone Call-Based Health Information System*
Justin Souvenir Niweteto: CMU Africa, MSIT 2020: *Design of a Phone Call-Based Health Information System*
Fraterne Kagame CMU Africa, MSIT 2020: *Design of a Phone Call-Based Health Information System*
Huguette Ingenere: CMU Africa, MSIT 2020: *French Interview Transcription for teachers in Cote d'Ivoire*
Marie Claudine Ingenere: CMU Africa, MSIT 2020: *French Interview Transcription for teachers in Cote d'Ivoire*
Nebiyou Yismaw: CMU Africa, MSECE 2018: *Digital and Voice based Systems to support GBV*
Fabiola Uwashema: CMU Africa, MSIT 2018: *Digital and Voice based Systems to support GBV*

Undergraduate

Maya Greenholt: CMU Pittsburgh, Cognitive Science: *Teacher Training Project in Ivory Coast*

Skills

Programming	Python, PHP, HTML/CSS, JavaScript, Android, Arduino, iOS
Technologies	Scipy, Sckikit, Weka, Numpy, AngularJS, Three.js, Bootstrap, MySQL, MongoDB, Redis, WebSockets
Coursework	Applied Fabrication, Applied Machine Learning, Data Pipeline, Gadgets Activity and Recognition in HCI,Education Goals, E-Learning Design Principles, Game Design Studio, Design of Educational Games

Selected Press

The Next Web *TeliportMe introduces 3D effects to its 360-degree panoramic app for Android*
Techcrunch *Test Flighting: Applover Launches Free, Crowdsourced Testing Platform for Android Apps*
Robert Scoble *Developers: crowd-source your testing of Android phones*
CMU *A new online resource from Carnegie Mellon University seeks to help people find the perfect rental*
HCII *EDigs Helps Apartment Hunters Find the Perfect Rental*
TheBetterIndia *How a National Level Cyclist Is Fighting Both Spinal Injury & Poverty with Inspiring Confidence*

Other

- **Philanthropy** I have raised over $20,000 for charity for various causes in India
- **Android** I have deployed 3 apps to the app store and have around 10,000 active users
- **Web** I have deployed over 20 websites to production. My best project has reached over 4 million users.
- **Teaching** I teach children a second language(Kannada) at the S.V. Temple in Pittsburgh
- **Swimming** I swam 10 miles from Elephanta Caves to Gateway of India to raise money for acid attack victims