# VENKATESH VARALA

DESIGN RESEARCHER(UX/UI)

+91 8473995050 | varalas07@gmail.com | www.iitg.ernet.in/stud/v.varala | Usability Engineering & HCI Lab IIT Guwahati

### **ABOUT MF**

+

Name: Venkatesh Varala

Date of Birth: 20th Nov, 1988

Relationship: Single
Nationality: Indian
Gender: Male

# DESIGN SOFTWARES +

ADOBE MUSE ORCAD

ADOBE XD PYTHON(VR worldviz)

+

ADOBE ILLUSTRATOR UNITY 3D

AXURE ARDUINO IDE

INVISION

ADOBE PHOTOSHOP

Tobii EYE TRACKING

#### SKILLS

**USABILITY RESEARCH** 

PRODUCT DESIGN

**ETHNOGRAPHIC STUDIES** 

**DESIGN THINKING** 

**UX RESEARCH** 

**INTERFACE DESIGN** 

PRODUCT EVALUATION

RESEARCH METHODOLOGY

SCIENTIFIC WRITING

**ENGINEERING DESIGN** 

COMPUTER PROGRAMMING

# WORK EXPERIENCES

SYSTEM DESIGNER

(2011 - 2012: 1 Yr) Full-time Intern Sanmina-SCI Systems USA - India Design Center

Worked as system designer, responsible

for designing Automated Luminaries Charectari-

zation System.

## **EDUCATION**

+

Ph.D(Design) Indian Institute Of Technology Guwahati

(2012 - Synopsis held

on 14-Aug -18)

CPI- 9.2

Working in the areas of User Experience, Interface Design, Usability Engineering & Design Semantics.

M.Des(Design)

.... 55(2 55.9.

(2012)

Indian Institute Of Information Technology
Design & Manufacturing (IIITD&M)

CPI- 7.9

Engineering Products, Electronic Systems Design

B.Tech(ECE)

VNR Vignanajyoti Institute of Engineering and Technology (VNR VJIET)

(2010) **CPI- 6.8** 

Electronics and Communication Engineering

XII (DECE)

State Board of Technical Education and Training AP

(2007) **CPI- 8.8** 

GPTC Masabtank,Hyderabad

Х

(2004)

State Board of Secondary Education

CPI- 8.7

Sharada Vidyaniketan,Karimnagar

# ACADEMIC SCHOLARSHIPS

MHRD Merit Scholarship During PhD

(2012-2017)

MHRD Merit Scholarship During M.des

(2010-2012)

State Government Merit Scholarship For Bachelor Education (2007-2010)

### **PROJECTS**

+

#### 1. Designing IoT Enabled Smart home Interface System For Indian Contexts.(PhD Work)

(Supervisor Pradeep Yammiyavar, IIT Guwahati)

Indian is a country where we see diversified population in so many ways such as culture, language, socioeconomics etc. When it comes Graphical User Interface Based appliance such as computer, Mobile phones, ATM Kiosks etc. full usage of these products is limited to few user groups as research suggests. This Research based work explores the future IoT Enabled smart-energy utilizationscenarios in the Indian context. The Intention is to design Interfaces for Users across various Contexts considering the heuristic guidelines from the research, findings from the User studies. Set of Interfaces were designed and User tested across the Urban and Rural Context.

Areas of Work: HCI, Usability Engineering, Design Semantics, Internet of Things (IoT), Smart-grid, Interface Design Heuristics.

#### 2. Hardware Design for Optical characterization and testing laboratory

(Supervisor Girish Ramakrishnan, Sanmina SCI Systems & Dr. Noor Mahammad SK IIITD&M K)

This Project is aimed at designing the Luminaries (Electrical Lamps) Testing facilities. Testing facility characterizes luminaries in terms of critical features such as exact color of light, beam area . These parameters are critical to the applications such as Interior light design, Sports arenas, Museums etc.

Areas Of Work: Light Characterization, Lighting Design, Product Benchmarking, Quality Function Deployment (QFD), PCB Design and Manufacturing, Reliability Engineering, System Design. Embedded Systems.

#### 3. Design and Planning of LED Home Lighting System

(Supervisor. Noor Mohammad SK Mdes 2011, IITD&MK)

In our day-to-day life, there are many areas where power is being wasted. This is because of human forgetfulness and excess usage. The idea is to use power efficiently and control this wastage by electronic means (Auto) effectively. This Project is aimed at conceptualizing and designing a system that is energy efficient. Set of User studies are carried out to understand the users, Usage scenarios, user needs etc. A system is conceptualized based on the studies and conceptual designs are proposed.

Areas Of Work: Home-lighting Design, Smart-homes, User requirements studies, QFD, Embedded Systems.

#### 4. Designing multimedia gadget using ATMEGA 328p

(Supervisor: Mrs Dhanalaxmi BTech 2010, VNR VJIET)

This work is aimed at exploring the possibilities and designing multimedia enabled gadget using open source hardware and software. A Multimedia gadget using Atmega328p was designed and manufactured with help of open source hardware and software.

Areas of Work: Embeded Systems, Open Source, PCB Design and Manufacturing.

### ACADEMIC RESEARCH ROLES & RESPONSIBILITIES +

Teaching Assistant (2010-2012 during MDes)

- 1. Basic Product Conceptualization and Design -(Teaching, Conducting Quizzes, & Assignment Evaluations,)
- 2. PCB Design and Modeling-(Conducting Laboratory Sessions and Assignment Evaluations,)

Teaching Assistant (2013-2017 during PhD, Assisting Professor, Assignment Evaluations, Occasional Presentations)

- 1. Introduction to Design
- 2. Design Methods
- 3. Design Management
- 4. Environment and Experiential Design

Research Assistance (2013-2018 during PhD)

Keyrole in setting up Virtual Reality Facility at Center for Education Technology, IIT Guwahati. Facility comprised of Motion sensor enabled Sony HMZ VR Headset coupled with Microsoft Kinect Body Sensor with Worldviz Python based IED environment.

Mentored and Assisted UX related Research Projects

1.Virtual Reality (VR) in E Learning 2.UI Design for Assamese conext

Intern Mentor (UE&HCI Lab) (Under Supervision of Prof. Pradeep Yammiyavar)

UI Development of Smart home Interfaces (Content Exploration) (December 2016)
 Number Of Interns -4
 Intern Affiliations: Mdes Students (MIT ID Pune), Bdes Students (IIT Guwahati)

2. Development of Virtual Reality Based IoT enabled Smart Energy Utilization User Interfaces (May-June 2017) Number Of Interns- 3 Intern Affiliations: Mdes and Bdes Students (IIT Roorke, IIT Delhi and IIIT Delhi)

#### POSITIONS OF RESPONSIBILITITY

Accommodation Team Lead - ICORD 17,International Conference, IIT Guwahati Team Member ,Transportation -HWWE14 ,International Conference,IIT Guwahati Election Officer ,Student Gymkhana Election,2016 IIT Guwahati.

### AWARDS & STOCHASTIC ACHIVEMENTS

1st Position in District level all School Quiz -2003 Class Topper at School 10th Standard -2004 State 67th Rank in Engineering Entrence Test-2007

# **PUBLICATIONS**

- 1. Yammiyavar P, Varala V: Graphical User Interface Perceptions and their role in Influencing Sustainable Usage: A Study of Semantics of Communication and Interaction Of Smart meter Usability, HWWE'14, International Ergonomics Conference User Centered Design and Occupational Wellbeing, Abstract Proceedings.
- 2. Varala V., Yammiyavar P. (2018) Product Graphical User Interfaces: A Study for the Meaning and Usability on Automobile Dashboard User Interfaces in Indian Context. In: Ray G., Iqbal R., Ganguli A., Khanzode V. (eds) Ergonomics in Caring for People. Springer, Singapore
- 3. **Varala V; Yammiyavar** P: A User Centric Information Design approach for commun-icating Electricity Energy consumption for its Conservation and Sustainable Management RAER 2016..
- 4. Varala V., Yammiyavar P. (2017) A Preliminary Semantic Study on Communication and Perception of Energy Meter Graphics. In: Chakrabarti A., Chakrabarti D. (eds) Research into Design for Communities, Volume 2. ICORD 2017. Smart Innovation, Systems and Technologies, vol 66. Springer, Singapore
- 5. Varala V, Yammiyavar P (2016) GUI design for IoT enabled smart home devices using using semantic and usability approach Research Conclave 16,IIT Guwahati.

## CONFERENCES & WORKSHOPS

- 1. HWWE'14, International Ergonomics Conference User Centered Design and Occupational Wellbeing.,IIT Guwahati
- 2. HWWE'15 International Ergonomics Conference-Ergonomics in Caring for People.IIT Bombay
- 3. RAER 2016..National Conference on Recent Advancements in Environmental Research ,IIT Guwahati.
- 4. ICORD 2017. International Conference on Research in to Design -Smart Innovation, Systems and Technologies, IIT Guwahati.
- 5. Research Conclave 16.//T Guwahati.
- 6. National Conference Labview Technologies 2011, National Instruments, Bangalore.
- 7. Workshop on Intellectual Property Rights 2016, IPR Cell, R&D IIT Guwahati.
- 8. Workshop on Intellectual Property Rights 2015, IPR Cell, R&D IIT Guwahati.

# LANGUAGES

**ENGLISH** 

TELUGU

HINDI

# OTHER INTERESTS +

RUNNING, READING

LAWN TENNIS, FIXING STUFF.

# REFERENCE

Prof Pradeep Yammiyavar FDRS pradeep@iitg.ernet.in Usability Engineering & HCI Lab Indian Institute of Technology Guwahati

Venkatesh Varala 15-November-2018