

A Wildcard Design Technologist passionate about physical interface design and engineering

http://ankuragrawal.xyz ankur.agrawal@outlook.com 1.206.201.9555

# **EDUCATION**

UNIVERSITY OF WASHINGTON, Seattle, WA MS in Human Centered Design & Engineering (HCDE) | 2014 - 2016

# JAYPEE INSTITUTE OF INFORMATION & TECHNOLOGY, Noida, India

B.Tech in Computer Science & Engineering | 2008 - 2012

# **COURSERA**

Individual Study | 2011 - 2014

Human-Computer Interaction, Critical Thinking in Global Challenges, Model Thinking, Machine Learning, Computational Neuroscience, Web Intelligence and Data Mining, Image and Video Processing

# LEADERSHIP EXPERIENCE

# ACM INTERNATIONAL CONFERENCE ON MULTIMODAL INTERACTION (ICMI), Seattle, WA Volunteer Chair | 2015

- Created and maintained the website of the conference
- Coordinated volunteers and registration desk

# IEEE, INTERNATIONAL CONFERENCE ON CONTEMPORARY COMPUTING (IC3), Noida, India

Organizer | 2010 - 2012

 Supervised hospitality operations, stationery, registration desk and volunteers

# TECHNOLOGY ACCESS FOUNDATION ACADEMY (TAF), Seattle, WA

Judge | 2015

 Evaluated project presentations on design, technology and engineering

# HCDE GRADUATE STUDENT ASSOCIATION, Seattle, WA

Treasurer | 2015 - 2016

- Managed accounts, administrative funds and budgets
- Planned design activities and events

# **WORK EXPERIENCE**

# USER EXPERIENCE INNOVATION (UXI) - INTEL LABS, Hillsboro, OR

Design Technologist | MAY 2016 - PRESENT

- Work on R&D projects to design next generation of AR, VR, immersive, automated vehicle, smart spaces experiences
- Conduct concept prototyping, sketching, storyboarding, game logic and user research; and collaborate with development teams

# USER EXPERIENCE INNOVATION (UXI) - INTEL LABS, Hillsboro, OR

Intern - UX Designer | JUN 2015 - SEP 2015

- Initiated an R&D project to design interactive tangible toys using RFID
- Conducted tangible prototyping, sketching and user research

#### TRIONIX SOLUTIONS, Ghaziabad, India

Entrepreneur | AUG 2011 - JUN 2014

- Led a team of 10 designers and developers
- Fulfilled a dual role as a UI engineer and a full-stack developer
- Executed 30+ projects of graphic design and responsive web and mobile applications for clients in USA, UK, China, Singapore and India

# INTERACTIV LLC, Boston, MA

Head of Development | JAN 2014 - MAR 2014

- Designed/developed MVP of an interactive Chrome extension for YouTube, which allows users to add annotations and stories to the videos

# MTREE SOFTWARE PRIVATE LIMITED, Noida, India

Software Engineer | JUN 2012 - JUN 2014

- Designed/developed a hybrid mobile application, IceBreaker a networking application which facilitates spatial neighbor search and promotes in-person interactions at events
- Designed/developed a webcam based 3D face reconstruction and virtual glasses try-on system
- Built a paper touch pad to detect finger touch with webcam

#### ICU INDIA, Jaipur, India

UI/UX Engineering Intern | MAY 2011 - JUN 2011

- Designed/developed a web application, EManage – a management tool which enables supervisors to track employee records such as work hours and tasks assigned

#### **TEACHING EXPERIENCE**

# MHCI+D, UNIVERSITY OF WASHINGTON, Seattle, WA

Graduate Teaching Assistant, Designing Interactive Systems (HCID 510) | MAR 2015 - JUN 2015

- Guided a class of 28 graduate students in design and interactive technologies, favoring design thinking in lieu of implementation concerns
- Graded assignment and project submissions per instructions of faculty members

# HCDE, UNIVERSITY OF WASHINGTON, Seattle, WA

Guest Lecturer, Visual Design | MAR 2015 - JUN 2015

- Delivered a lecture on design tools to a class of 30 senior-year college students

# COMMUNITY DATA SCIENCE WORKSHOP (CDSW), UNIVERSITY OF WASHINGTON, Seattle, WA

Mentor, Python | MAR 2015 - JUN 2015

- Provided over a hundred students with sessions on Python programming

# DREAM PROJECT, UNIVERSITY OF WASHINGTON, Seattle, WA

Lead Mentor, STEM Education | SEP 2015 - MAR 2016

- Taught middle and high school students about tangible design, prototyping and programming
- Organized weekly tinkering workshops on STEM related topics

# HCDE, UNIVERSITY OF WASHINGTON, Seattle, WA

Mentor, User Centered Design Charrette | MAR 2015 - JUN 2015

- Held design activities and workshops in high schools
- Instructed students in user-centered design processes

# JAYPEE INSTITUTE OF INFORMATION & TECHNOLOGY, Noida, India

Lab Instructor, Algorithms | JUN 2011 - MAY 2012

- Offered lessons in algorithm design and data structures to a class of more than 45 students
- Reveiwed and suggested modification in student assignments  $% \left( 1\right) =\left( 1\right) \left( 1\right)$

# **SELECTED PATENTS & PUBLICATIONS**

# TRANSITIONING AUGMENTED REALITY OBJECTS IN PHYSICAL AND DIGITAL ENVIRONMENTS US 20170178406 A1 | PENDING 2016

# POSITION DETERMINATION AND CONTROL WITH RADIO FREQUENCY IDENTIFICATION TAGS US 9704003 B1 | SEP 2016

#### SYNKU: EXPLORING THE PRODUCTION OF SENSORY OBJECTS

CHI Extended Abstract '15 | ankur agrawal, wenvi hidayat, aravind ravi, mark stamnes, meishen yin, and daniela rosner

# DESIGNING FOR MOVEMENT IN PUBLIC LIFE WITH ITINERANT PROBES

2016 ACM Conference on Designing Interactive Systems | DANIELA K. ROSNER, MARGARET E. MORRIS, ARIEL DUNCAN, SARAH E. FOX, KATHI R. KITNER, ANKUR AGRAWAL, AND MELL CHEN

#### **HONORS & AWARDS**

#### GRADUATE INNOVATION AWARD

Dept. of HCDE, University of Washington, Seattle, WA | JUN 2016

- For research work and projects during master's degree program

#### **CHEETAH**

Intel Labs, Intel Corporation, Hillsboro, OR | SEP 2016

- For a prototype designed and developed in record time to narrow down the vision of smart home spaces for kids

#### PEOPLE'S CHOICE FOR BEST INTERN PROJECT

Intel Labs, Intel Corporation, Santa Clara, CA | SEP 2015

- For innovative prototypes of tangible toys at an internal open house

# CENTRAL SECTOR SCHOLARSHIP

Ministry of Human Resource Development (MHRD), Government of India | JUN 2008 - JUN 2012

- For exemplary academic performance and achievements in high school

# JED-I PROJECT CHALLENGE

The Joy of Engineering, Design and Innovation (Jed-i), Bangalore, India | JUN 2012

- For innovation in capstone project for bachelor's degree

# **SKILLS**

# **DESIGN STRATEGIES AND METHODS**

 - User-Centered Design, Experience Design, Design Research, Spatial Design, Mental Models, Contextual Inquiry, Qualitative Research, Participatory Design, Storyboarding, Scenario Designs, Wireframing, Sketching, Paper Prototyping, Rapid Prototyping, Usability Testing, Surverys, and Wizard of Oz

### **DESIGN TOOLS**

- Pencil and Paper, Adobe Creative Suite, Blender, Rhino, 3D Studio Max, Wacom Cintiq, InVision, Proto.io, Tableau, Axure, Justinmind, POP, Balsamiq, D3 and Phonegap

# **FABRICATION TOOLS**

- Laser Cutting, 3D Printing, CNC, Embedded Devices, Prototyping platforms like, Arduino, Edison, Galelio, Curie, etc., Atmega micro-controllers, Wood Working Power Tools, Mechanical Components

#### **PROGRAMMING**

- C/C++, Java, Python, Ruby/Rails, SQL, PHP, HTML, CSS, Javascript, Coffee Script, C#, Visual Basic, Shell Scripting, ASP.net, CUDA, OpenCV, and AngularJS