

Catherine Downey

User Experience Designer

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Tongelresestraat 278A, Eindhoven 5613DV, The Netherlands • Dual USA and British Citizenship

OBJECTIVE

I am an interaction designer who enjoys working in multi-disciplinary teams on difficult design problems. I am adept at finding solutions that align with business goals and meet user needs. I hope to use these talents at an innovative company that recognizes the value of the human-centered design process.

EDUCATION

October 2014 - present	Professional Doctorate in Engineering in User System Interaction Eindhoven University of Technology, the Netherlands
September 2013 - August 2014	Graphic Design University of California, Berkeley Extension, USA
August 2002 - May 2006	Bachelor of Arts in Computer Science University of California, Berkeley, USA

EXPERIENCE

User Experience & Interaction Designer **October 2014 - present** **Eindhoven University of Technology, Eindhoven, The Netherlands**

- Solve complex problems keeping client's business goals, user's needs and product requirements in mind
- Use the human-centered design process to create useful and meaningful interactions with technology
- Design, develop and evaluate digital and tangible prototypes in a fast-paced environment
- Work in multidisciplinary teams to engineer a wide range of products and systems
- Prototype design ideas using sketches, storyboards, videos, digital interfaces and tangible materials
- Perform user research and usability studies with a variety of user groups
- Projects include improving the story time experience for children, visualizing premature babies' physiological signals, and designing an app for narcolepsy patients

See portfolio at www.catherinedowney.com for more projects

Technical Director **September 2006 - August 2014** **DreamWorks Animation, Redwood City, California**

Technical Director	December 2010 - August 2014
Associate Technical Director	November 2008 - December 2010
Entry Level Technical Director	September 2006 - November 2008

- Design, develop and implement new applications and processes for animated feature films, keeping ease of use and the final look of the film in mind
- Engage cross-functionally with engineers, technical directors, and artists to leverage new technology, prioritize features, and resolve technical issues
- Engineer Python solutions to improve efficiency through an automated system for lower resolution assets, resulting in a 30% reduction of artist time and 50% reduction of rendering time
- Train and mentor successful technical directors, artists and interns
- Perform the artist's role of lighting and compositing shots when needed

Software Developer Intern **June 2006 - September 2006** **The Orphanage, Visual Effects Studio, San Francisco, California**

- Create an application that makes it easy for artists to interact with machines on the render farm
- Using the extreme programming methodology with the software team, create and maintain applications

Undergraduate Research Apprentice **August 2005 - May 2006** **UC Berkeley, Computer Science Department, Berkeley, California**

- Received an Intel Undergraduate Research grant to research mapping 2D tessellations onto 3D meshes
- Modify a C program to visualize and interact with the mapping on these models

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Student Tech Specialist / NASA Associate Intern May 2005 - August 2005

Lockheed Martin Advanced Technology Center and NASA Ames Research Center, Intelligent Robotics Group, Mountain View, California

- Create an interactive application for controlling robots with a team of NASA and Lockheed employees
- Write technical documentation communicating the plan to integrate technology efficiently

Undergraduate Research Apprentice September 2004 - May 2005

UC Berkeley, Architecture Department, Berkeley, California

- Assist professor and graduate students on project to create an interactive virtual learning environment
- Modify Java code to improve the motion and mouse interaction of the avatars

Research Intern June 2004 - August 2004

University of Sussex, Center for VLSI and Computer Graphics, Falmer, England

- Assist research team on project to create a virtual museum and digital artifact database
- Program new features for how to digitally view artifacts in the Victoria and Albert virtual museum

Exhibit Facilitator August 2003 - May 2006

UC Berkeley, Lawrence Hall of Science, Berkeley, California

- Explain scientific concepts to children, teenagers and adults
- Give presentations and tours to get children excited about science

SKILLS

Programming: html, css, Python, Processing, Arduino, javascript, D3.js

Software: Photoshop, Illustrator, Axure, Balsamiq, Unity, Nuke, Maya

ADDITIONAL

Co-Founder, Volunteer May 2006 - present

BeeHive School Project of ASAP Africa, Mzuzu, Malawi

Accomplishments

- Secured US non-profit status for an organization that strives to improve the quality of education in Malawi
- Raised over \$20,000 USD for construction for the school
- Successfully organized and oversaw creation of computer lab at the school by raising funds, choosing technology, shipping equipment, and recruiting and managing volunteers
- Created an online presence for the primary school by designing and maintaining a website, joining GlobalGiving and GlobalGiving UK, started crowd funding campaigns and creating a presence on social media

Ongoing Work

- Advise and communicate with primary school administration in Malawi
- Write grants, stewardship letters and digital updates about the school
- Represent the organization in local rotary club chapters
- Organize US fundraisers
- Keep track of donations from many sources and transfer to the Malawian bank account

Enjoy Exhilarating Experiences

I am lucky to have had the opportunity to travel and experience amazing places - these have broadened my views of the world. I have trekked through the Andes, swum with wild dolphins in New Zealand, camped near dingoes in Australia, surfed in Costa Rica, skied the Swiss Alps, kayaked the San Juan Islands, slept in a grass hut on a Samoan beach during a cyclone, paddle boarded down a river in Cambodia, cycled over 3,000 km through Europe, slept in a tree house, sailed around the Greek Isles, and have scuba dived in Bali. I ski, cycle and camp in California every chance I can get!