

# HCI/UX/Design Jobs for New College Grads

Philip Guo

<http://pgbovine.net/hci-design-jobs.htm>

Assistant Professor of Cognitive Science

UC San Diego

2019-11-26, Prototype 6

The goal of this talk is to give college students an **overview** of Human-Computer Interaction (HCI) and Design, then show what **jobs** you can get with an HCI/Design degree.

Many students & alumni wished they had learned what's in this talk ***at the beginning of college.*** Because all of this takes lots of time to prepare. Start early!

Warning: we're gonna go fast and there's a lot of dense text packed into slides.

This is **NOT** an example of good visual slide design!

It's actually very very bad visual design :)

But you can find slides and videos online:  
<http://pgbovine.net/hci-design-jobs.htm>

# Lots of HCI/Design Faculty and Research Staff at UC San Diego across many departments

The screenshot displays the UC San Diego Design Lab website, featuring a grid of 28 faculty and research staff members. Each member's profile includes a portrait, name, and title. The website header includes navigation links for Research, Education, Community, Events, Jobs, About, News, Give Now, and Contact Us. The staff members are arranged in four rows of seven, with the last row containing only one member.

Name	Title
Don Norman	Director, The Design Lab
Morana Alac	Associate Professor, Communication
Elijah Aronoff-Spencer	Assistant Professor, Medicine, Division of Infectious Diseases and Global Public Health
Ben Bergen	Professor, Cognitive Science
David Kirsh	Professor of Cognitive Science
Scott Klemmer	Co-Director, The Design Lab; Professor, Cognitive Science; Computer Science & Engineering
Michael Kuriu	Director, UCSD Center for Integrative Medicine and Clinical Training - Osteopathic Center San Diego
Albert Lin	Assistant Research Scientist, Qualcomm Institute
Benjamin Bratton	Associate Professor, Visual Arts
Sheldon Brown	Professor Emerita, Visual Arts
Nate Delson	Associate Teaching Professor, Mechanical and Aerospace Engineering
Steven Dow	Associate Professor, Cognitive Science; Computer Science & Engineering
Michael W. Meyer	Associate Teaching Professor, Design, Rady School of Management
Camille Nebecker	Assistant Professor, Behavioral Medicine; Family Medicine & Public Health; School of Medicine
Kevin Patrick	Professor, Family and Preventive Medicine
Laurel Riek	Associate Professor, Computer Science & Engineering
Deborah Forster	Research Specialist, Contextual Robotics Institute
Judith Fan	Assistant Professor, Psychology
William Griswold	Professor, Computer Science & Engineering
Philip Guo	Assistant Professor, Cognitive Science; Computer Science & Engineering
Taylor Scott	Assistant Teaching Professor, Cognitive Science
Edward Wang	Assistant Professor, Electrical and Computer Science & Engineering
Nadir Weibel	Associate Professor, Computer Science & Engineering
Hajun Xia	Assistant Professor, Cognitive Science
Eric Hekler	Associate Professor, Family Medicine & Public Health; Director, Center for Wireless & Population Health Systems
Linda Hill	Clinical Professor, Family Medicine & Public Health; Director, UCSD/SDSU General Preventive Medicine Systems
Jim Hollan	Co-Director, The Design Lab; Professor, Cognitive Science; Computer Science & Engineering
Lily Irani	Assistant Professor, Communication
Michael Yip	Assistant Professor, Electrical and Computer Engineering

[Design Lab people page](#)

+ ~30 grad and ~60 undergrad students working on research (Nov 2019)

Human-Computer Interaction  
(HCI) / Design is a ***super diverse***  
and interdisciplinary field of study,  
so everyone you meet will have  
their own take on it.

I'll try to cover the very basics.

**HCI** often used in academia

**UX** (User eXperience) or **design**  
job titles often used in industry

What do you typically learn in intro. Human-Computer Interaction (HCI) and Design courses?



What you learn in HCI/Design courses:

User Research

What do people really need?

Personas/Storyboards

What should we consider building?

Paper Prototyping

How should we start to build it?

Digital Mock-Ups

What should it look and feel like?

Interactive Prototypes

User Testing

How can we measure how well it works for real users?

Online Experiments

Final Web/Mobile App

How can we ship a finished product?

What you learn in HCI/Design courses:

User Research

Personas/Storyboards

Paper Prototyping

Digital Mock-Ups

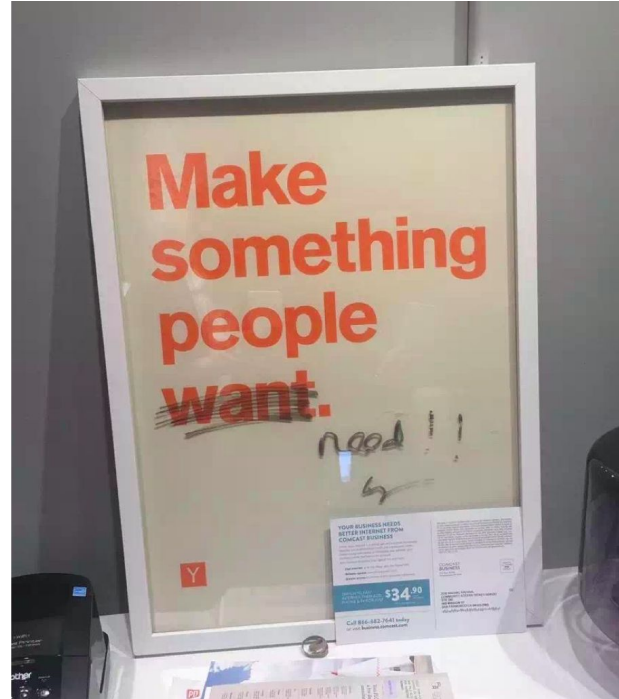
Interactive Prototypes

User Testing

Online Experiments

Final Web/Mobile App

Observe potential users in their natural habitats, interview them, find their actual problems/needs.



“Make something people *need!!*”  
want -> need change [by Alan Kay](#)  
Motto by [Y Combinator](#), photo by Kai-Fu Lee

What you learn in HCI/Design courses:

User Research

Personas/Storyboards

**Paper Prototyping**

Digital Mock-Ups

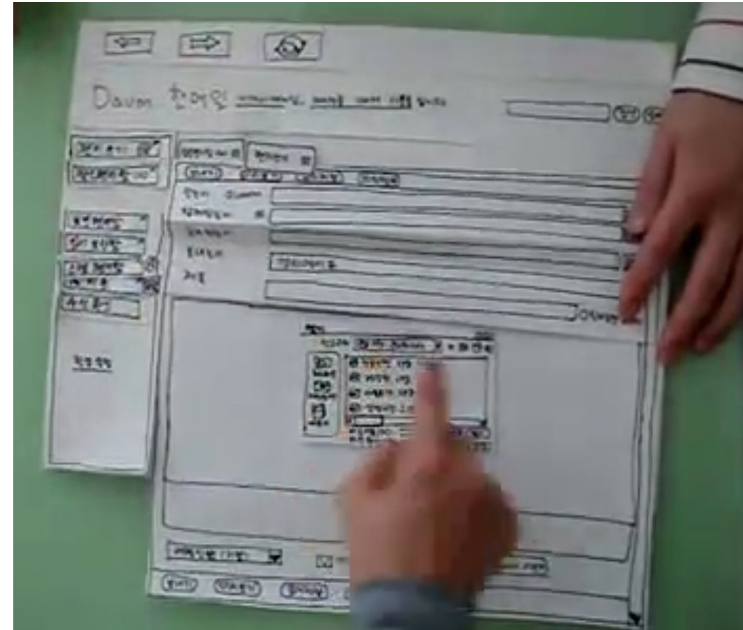
Interactive Prototypes

User Testing

Online Experiments

Final Web/Mobile App

Make low-fidelity sketches on paper and get early user feedback



Video: <https://www.youtube.com/watch?v=GrV2SZuRPv0>

What you learn in HCI/Design courses:

User Research

Personas/Storyboards

Paper Prototyping

**Digital Mock-Ups**

**Interactive Prototypes**

User Testing

Online Experiments

Final Web/Mobile App

Use computer tools to make higher quality prototypes. Write code to make it into a working app.



\$60 million more in campaign donations

Source: <https://blog.optimizely.com/2010/11/29/how-obama-raised-60-million-by-running-a-simple-experiment/>

User Testing  
Online Experiments

Final Web/Mobile App

Do science! Test on real people in their natural habitats, get users into your lab, deploy experiments online & analyze collected data.

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Personas/Storyboards

Paper Prototyping

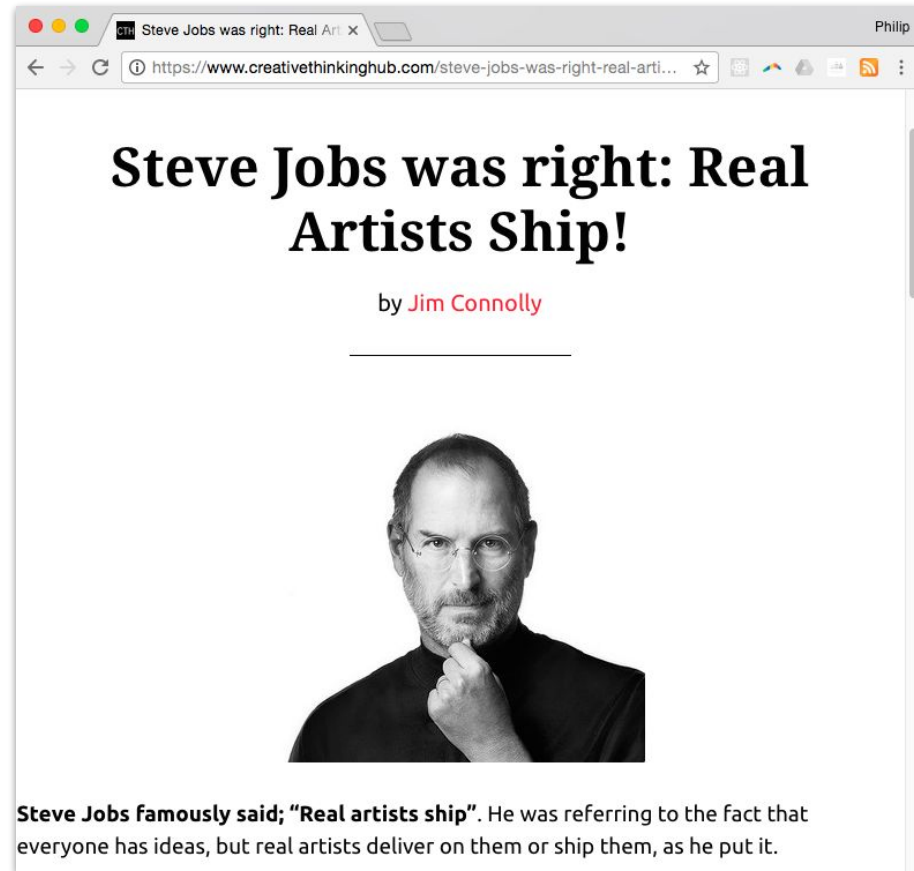
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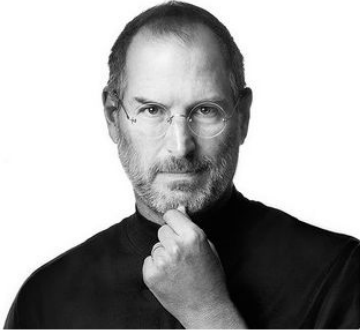
Online Experiments

Final Web/Mobile App



Steve Jobs was right: Real Artists Ship!

by Jim Connolly



**Steve Jobs famously said; "Real artists ship".** He was referring to the fact that everyone has ideas, but real artists deliver on them or ship them, as he put it.

Source: <https://www.creativethinkinghub.com/steve-jobs-was-right-real-artists-ship/>

Product is never "done", just shipped!

Outline for rest of talk:

Kinds of HCI/UX/design jobs

How to get one out of college

What about grad school?

Outline for rest of talk:

## **Kinds of HCI/UX/design jobs**

How to get one out of college

What about grad school?





I made this talk by consulting with people (many UCSD alum) who have recently worked in top design jobs



airbnb



Uber

Qualcomm

Contributors: Carrie Cai, Emily Danchik, Emy Lin, Carolyn Zhang, Marcos Ojeda, Judy Chun, Sean Kross, Don Norman, Thi Dang, Kandarp Khandwala, Christi Hagen, Anvisha Pai, Rajiv Sancheti, David Wu

All of the insights are theirs;  
all of the mistakes are mine.

Hopefully in the future I can call on  
*you* to add your insights.

One-slide summary: if you want an HCI/UX/Design job ...

Build up a design ***portfolio***, lean hard on personal and alumni ***connections***, and get a design ***internship*** while in college.

(This will maximize your chances of getting interviews. You still need to pass them!)

What jobs are available?

Jobs match what you learn in  
intro. HCI/Design courses!

What you learn in HCI/Design courses:

User Research

What do people really need?

Personas/Storyboards

What should we consider building?

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Digital Mock-Ups  
Interactive Prototypes  
User Testing  
Online Experiments  
Final Web/Mobile App

What jobs allow you to do this:

UX (**U**ser **eX**perience) Researcher  
PM (Product/Project) Manager

UX/Product Designer

Visual Designer

UX/Product Designer, UX Architect,  
UX Prototyper, Interaction Designer

UX Researcher

UX Researcher

Data Scientist

Front-end Developer, Product  
Engineer, Software Engineer

A disclaimer on design *job titles*:

Can be confusing since different companies call similar jobs by different names; and these names change fast.

Read *job descriptions* and ask companies for what they really want from candidates.

The purpose of this list is to:

- Show how UX jobs often hide under non-UX names
- Provide example titles that will help you search for UX positions
- Help you justify adding UX activities to your current position

3D Artist	Information Architect	UX / Project Manager
Analyst / Programmer	Information Architect and Front End Developer	UX / UI Architect
Analytics Product Manager	Information Architect and Interaction Designer	UX / UI Designer
Application Usability Designer	Information Architect, Ontology Engineer	UX / UI Designer, Information Architect
Architect: UX / UI	Information Developer	UX / UI Developer
Art Director – Print and Interactive	Information Resource Manager	UX / Usability Consultant
Assistant Webmaster	Information Systems Associate	UX / Usability Specialist
Associate Director – Digital Marketing	Insight And Planning Director	UX / Visual Designer
Business Analyst	Instructional Designer	UX Analyst
Business Leader	Interaction Architect	UX Architect
Business Systems Analyst	Interaction Design Director	UX Architect and Strategist
Business Unit Director	Interaction Designer	UI / UX Designer
Chief Design Officer	Interactive Designer	UI / UX Specialist
Chief of Product	Interactive Designer and UX	UI Consultant
Chief Research Officer	Interactive Marketing and Usability Consultant	UI Designer
Client Website Platform Supervisor	Interactive Marketing Manager	UI Designer and UX Specialist
Communications Consultant	International Manager for Training Development	UI Designer Engineer
Communications Manager	Internet Marketing Manager	UI Engineer
Content Manager	Intranet Employee Communications Manager	UI Specialist
Content Strategist	Intranet Project Manager	Usability Analyst
Content Strategy Manager	IT Usability Consultant	Usability Consultant
Conversion Consultant	Knowledge Manager	Usability Consultant / IT Teams Coach
Coordinator Digital Media	Lead Experience Strategist	Usability Coordinator
Creative Director	Lead Interaction Design	Usability Designer
Creative Usability Lead	Lead UX / Creative Designer	Usability Engineer
Customer Engagement Manager	Lead UX / UI Designer	Usability Engineer, Information Systems
Customer Experience Design Team Lead	Lead UX Analyst	Usability Expert
Customer Experience Manager	Lead UX Designer	Usability Manager
Design Director	Manager, Applications – Web	Usability Specialist
Design Manager		User Analyst
		User Centered Design Practice Lead

2013 survey of ~1000 HCI professionals:  
<https://www.nngroup.com/reports/user-experience-careers/>  
(Pages 97-99 in PDF)

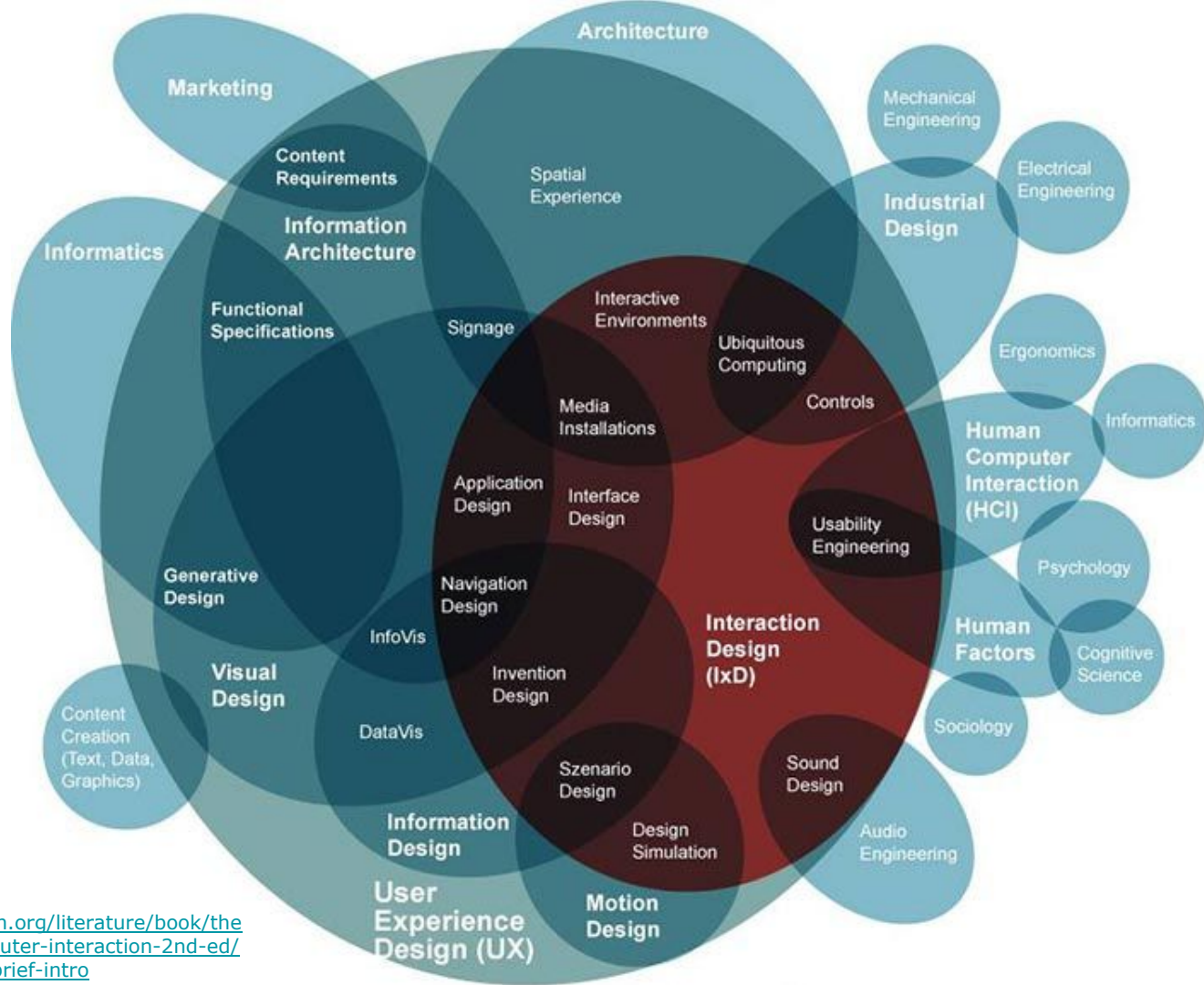


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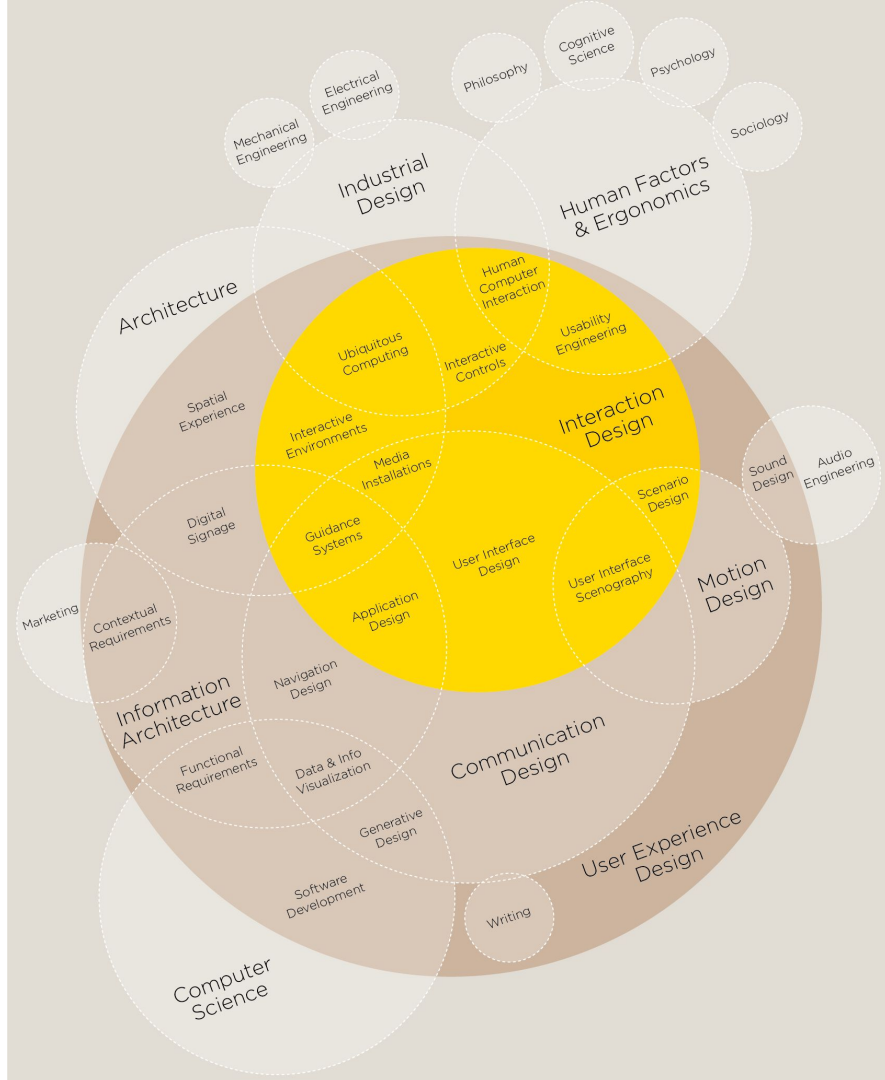
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Analytics Product Manager	Information Architect and Interaction Designer	UX / UI Designer
Application Usability Designer	Information Architect, Ontology Engineer	UX / UI Designer, Information Architect
Architect: UX / UI	Information Developer	UX / UI Developer
Art Director – Print and Interactive	Information Resource Manager	UX / Usability Consultant
Assistant Webmaster	Information Systems Associate	UX / Usability Specialist
Associate Director – Digital Marketing	Insight And Planning Director	UX / Visual Designer
Business Analyst	Instructional Designer	UX Analyst
Business Leader	Interaction Architect	UX Architect
Business Systems Analyst	Interaction Design Director	UX Architect and Strategist
Business Unit Director	Interaction Designer	UI / UX Designer
Chief Design Officer	Interactive Designer	UI / UX Specialist
Chief of Product	Interactive Designer and UX	UI Consultant
Chief Research Officer	Interactive Marketing and Usability Consultant	UI Designer
Client Website Platform Supervisor	Interactive Marketing Manager	UI Designer and UX Specialist
Communications Consultant	International Manager for Training Development	UI Designer Engineer
Communications Manager	Internet Marketing Manager	UI Engineer
Content Manager	Intranet Employee Communications Manager	UI Specialist
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Customer Engagement Manager	Lead UX / UI Designer	Usability Engineer, Information Systems
Customer Experience Design Team Lead	Lead UX Analyst	Usability Expert
Customer Experience Manager	Lead UX Designer	Usability Manager
Design Director	Manager, Applications – Web	Usability Specialist
Design Manager		User Analyst
		User Centered Design Practice Lead

Designer	Manager, Creative Direction	User Centred Designer
Digital Experience Architect	Manager, Interaction Design, Digital Creative	User Interface Architect
Digital Experience Manager	Manager, IT and Web Dev.	User Operations Analyst
Digital Expert / Digital Project Director	Manager, Product Dev.	User Research Lead
Digital Strategist	Manager, Program and System Readiness	User Research Manager
Director	Manager, UI and Web Application Group	User Researcher
Director of Analytics and Information Design	Manager, UX	UX / Content Strategy Lead
Director of Brand Marketing and Design	Manager, UX and Research	UX / HCI Researcher – Usability
Director of Consumer Experience	Manager, UX Design	UX / Information Architect
Director of Digital Customer Experience	Manager, UX Research	UX Consultant
Director of Direct Consumer Interaction	Manager, Web Services and Usability	UX Consultant / Designer
Director of Global Product & Experience	Managing Director	UX Consultant / Interaction Designer
Director of Interactive Development	Marketing Specialist Advisor	UX Design Lead
Director of Online Operations	Masters Teacher	UX Design Manager
Director of Product Management and UX	Mobile UX Designer	UX Designer
Director of Product Strategy	Online Designer	UX Designer / Consultant
Director of Quality Assurance	Open Source Strategist	UX Designer / Engineer
Director of Usability	Principal Analyst	UX Designer / Ergonomist
Director of UX	Principal Consultant	UX Designer / Interaction Designer
Director of UX Design	Principal Designer	UX Designer / UI Developer
Director of UX Research	Principal Software Engineer – Usability and UX	UX Developer
Director of UX Services	Principal User Researcher	UX Developer / Analyst
Director of Visual Communications and Brand Management	Principal UX Architect	UX Director
Director of Web Content Services	Principal UX Designer	UX Engineer
Director of Web Management & Design	Principal UX Developer	UX Expert – Partner
Documentation Coordinator	Principal, Consulting Firm	UX Information Architect
E-Learning Consultant	Principal, UX	UX Interaction Designer
Ecommerce Analyst	Producer	UX Lead
Editor / Copywriter	Product Designer	UX Manager
Engineer, Usability and User Research	Product Director	UX Professional
Ergonomist	Product Manager	UX Program Manager
Executive Director	Product Owner and UX Evangelist	UX Research Consultant
Experience Architect	Product Digital (Español)	UX Research Manager
Experience Design Manager	Professor	UX Researcher
Expert Strategist, UX Consulting	Project Manager	UX Researcher / Designer
Expert Usability Engineer	Public Information Representative / Managing Editor	UX Sketching and Ideation Instructor
	R&D Engineer / UX Engineer	UX Software Engineer
	R&D Manager	UX Solution Architect
	Research and Customer Experience Manager	UX Specialist
		UX Strategist
		UX Web Application Designer
		UX, Usability and Product Management Consultant
		Visual Designer
		UX / Director of UX



Source:

<https://www.interaction-design.org/literature/book/the-encyclopedia-of-human-computer-interaction-2nd-ed/human-computer-interaction-brief-intro>



# Simplified overview of design job titles<sup>[1]</sup>

- UX Researcher: needfinding, user testing/experiments
  - (often are master's or Ph.D. grads)
- Product Manager (PM): needfinding, team coordination
- UX/Interaction/Product Designer<sup>[2,3]</sup>: non-code prototypes
  - (**most common** type of job for new college grads)
- UX Architect/UX Prototyper: design + some coding
- Visual Designer: art/graphics
- Data Scientist: write code to analyze data; Ph.D.-focused
- Front-end Developer: write lots of production code

[1] you may do multiple roles in one job and "wear many hats"

[2] sometimes the term "product designer" refers to a person who takes on multiple design roles.

[3] to learn more: <https://www.invisionapp.com/blog/building-an-enterprise-ux-team/>

Outline for rest of talk:

Kinds of HCI/UX/design jobs

**How to get one out of college**

What about grad school?

How do you get an HCI/Design job out of college?

Build up a design ***portfolio***, lean hard on personal and alumni ***connections***, and get a design ***internship*** while in college.

***Portfolio + connections ->  
internship -> full-time job***

# Portfolio (basics)

- Start by making a personal website as your portfolio
- Class projects with design components (many at UCSD!)
- Volunteer to help on-campus groups or friends with projects; be resourceful about finding work
  - Look beyond web/mobile apps ...
  - e.g., posters, art pieces, event flyers, ...
  - business/marketing slide decks for friends



# Portfolio (basics)

- Design sprints, hackathons, or challenges/contests
- Work part-time as a freelance designer for local companies or friends' startups while in school
  - UCSD: The Basement or Rady Startup accelerator
- Once you get a design internship, put in portfolio
- Look at friends'/alumni's portfolios, resumes, and *LinkedIn pages* as examples of how to make yours

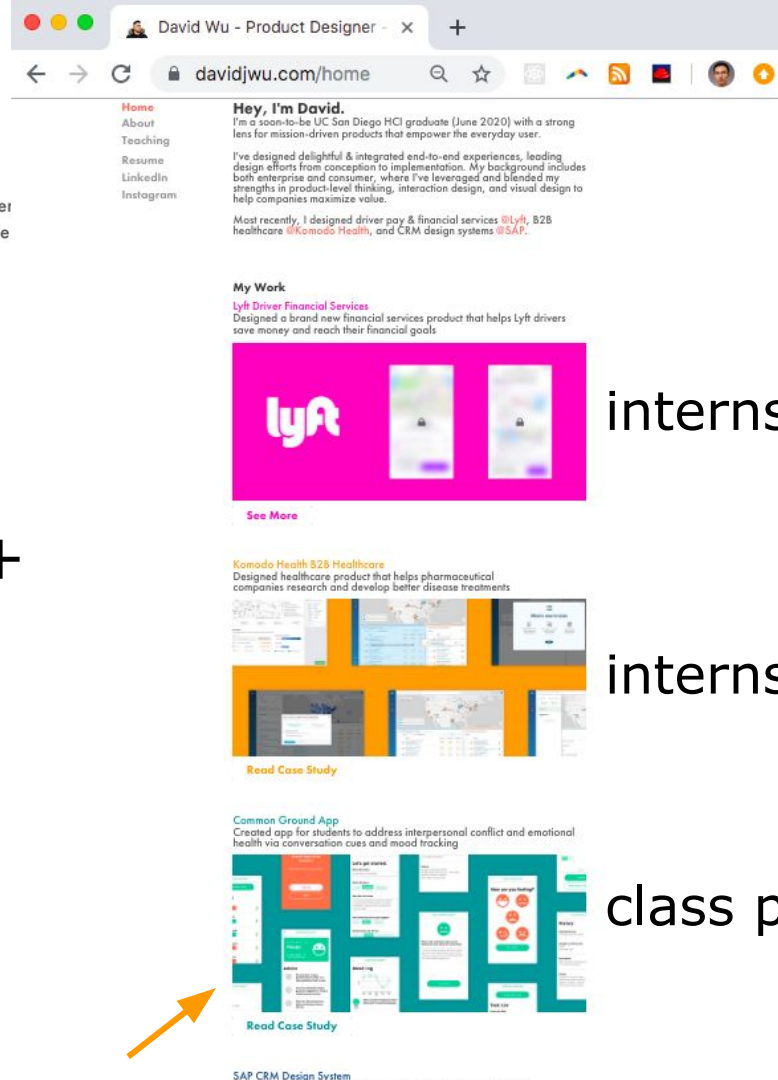
David Wu

Product Designer

- Home
- About
- Teaching
- Resume
- LinkedIn

## Hey there – I'm David!

I'm a Product Designer with a strong lens for mission-driven products that empower users. I've designed pay & financial services products @Lyft, B2B healthcare Health, and CRM design systems @SAP.



Design Portfolio =

Website with short intro + series of **case studies**

internship

internship

class project

One of my undergrad courses ([COGS127](#)) shows you how to make good case studies

[Rajiv Sancheti's advice on design portfolios, case studies, and resumes](#) (Nov 2019)

# Case study = single webpage of *process* & *rationale*



David Wu  
Product Designer

Home  
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Resume  
LinkedIn  
Instagram

**Common Ground**  
Web Development Project  
UC San Diego (COSC 120 – Interaction Design Course)

**Scope:** Project Management, User Research, UI/UX, Testing, Full-Stack Development  
**Timeline:** 3 months (January to March 2018)



#### Project Overview

As part of an Interaction Design course at UC San Diego, I worked with a team of three to define, research, design, and develop a mobile web app. Through this 10-week course, our team learned the principles of product development, product design, and web development.

Our application, called Common Ground, aimed at helping college students and young adults in difficult conversations around living situations. I was primarily responsible for designing the user interface for our application, product discovery efforts, feature scope prioritization, and managing development timelines. I also contributed to research, testing, and deployment efforts.

At the end of the course, we presented our app to an industry panel. Our team won 1st Place in the category of Most Innovative App.

#### The Problem

*"My roommate never cleans up the sink after they brush their teeth. I would bring it up, but it's such a small issue, and I don't know what to say."*

Many college students and young adults living with roommates or housemates may encounter small problems between themselves. However, many do not know how to approach the topic, and instead of addressing the problems right away, they let these problems incubate for a while before addressing them.

#### Need-Finding and Research

The first step of our design process was to conduct need-finding to understand our target audience and observe breakdowns. We needed to identify clear and non-trivial problems that our target audience experienced. We started by conducting interviews and asking open-ended questions, such as:

- What do you like about your college roommate experience? What don't you like about your college roommate experience?
- Tell me about the biggest hurdle of your college living experience. What made it a hurdle?



We looked to three popular apps used by members of our target user base, and pulled inspiration from these three apps. For instance, we liked the clean design format used by Airbnb, the card-like tips in Robinhood, and the simplistic form process in Credit Karma. We wanted to bring these elements and consciously use them to inform our design decisions and information architecture.



#### Storyboarding

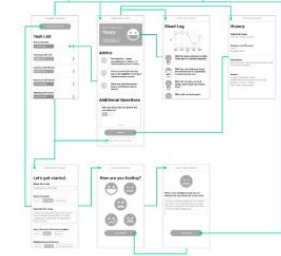
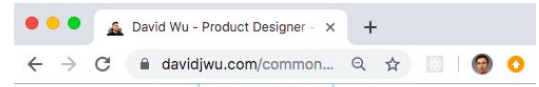
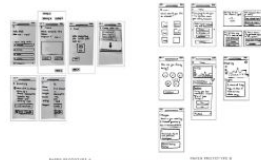
To summarize our need-finding and to build a better story of our users, we created a series of storyboards. These three storyboards captured the user's journey and experience through three separate roommate-related issues.



#### Design Iterations

Our team started our designs at low-fidelity with paper prototypes. This helped us reduce the overhead with redesigning at a more expensive and higher stage of fidelity.

In our paper prototypes, we visualized our application in its simplest form. After we created our paper prototypes, we conducted multiple heuristic evaluations to gather qualitative feedback from our users.



#### Testing Designs

Our team conducted a number of qualitative heuristic evaluations, according to Nielsen's 10 Design Heuristics. We used Nielsen's Heuristics as a framework to guide our conversations with students to gather feedback that could be directly used to improve our designs.



In addition to the heuristic evaluations we conducted, we also wanted to gather data to support our design decisions. In our heuristic evaluations, we found certain interactions where the user experienced something other than what we had anticipated. In those situations, we turned to A/B testing through Google Analytics. We relied primarily on quantitative testing when our own design intuition was not enough to produce the optimal user experience.



# Class project *case study* -> product design intern at Lyft

David Wu  
Product Designer

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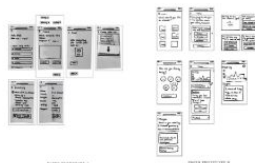
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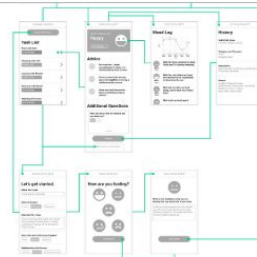
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The flowchart diagram illustrates the application's information architecture, showing the relationships between various screens and user flows.

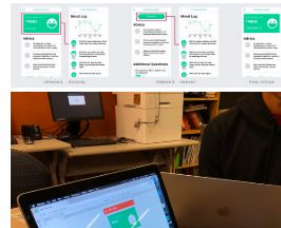


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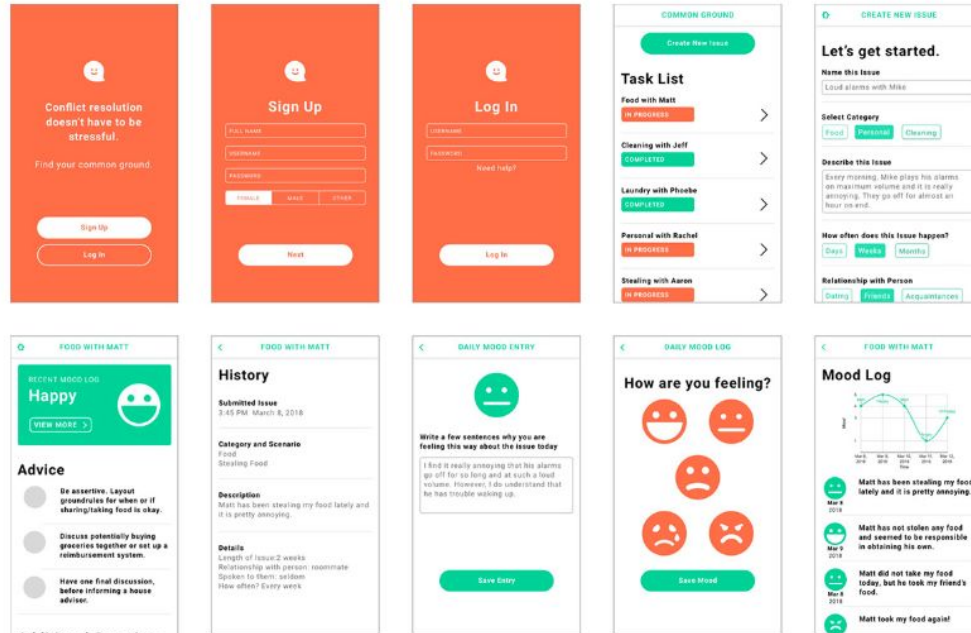


# Only show final app from class project -> NO INTERNSHIP :(



## Final Designs and Results

Ultimately, our team was able to design and fully develop our app. We presented our completed app to an industry panel and an audience of 500 people. Against nearly 100 other teams, our team won 1st Place in the category of "Most Innovative App."



# Portfolio (advanced)

- Be able to justify and critique your own process
  - **Justify what you did, how you did it, why you made each design decision, why it matters in the end**
  - Important for dispelling the myth that design is only about visual aesthetics or “making stuff look good”...
    - ... it’s about making stuff that benefits real users.
- Have a compelling personal ***point-of-view*** that frames your work and makes you stand out<sup>[1]</sup>
- One of my undergrad courses (COGS127) shows you how to make portfolios and case studies: <http://courses.pgbovine.net/cogs127/>

[1] employers have seen the same class projects over and over again, so go beyond those!

# Portfolio (advanced)

- It's often better to show how you *improved* an existing real-world product rather than creating your own entirely from scratch
  - More authentic and with real-world constraints
  - In fact, that's a much, much, much more realistic approximation of what you will do in your future job
- In your portfolio, highlight the most relevant projects for your desired job roles
- Example portfolios: [Cofolios](#) and [Bestfolios](#)

Companies don't really care ***what*** exactly you made for your portfolio projects; they just want to see that you've been engaging in a thoughtful and user-centered design process so ***you can do the same for them if they hire you!***



# Portfolio + **connections**

- Cold-email alumni, especially *recent* alumni
  - Look them up on **LinkedIn** and cold-email them
    - (you can search and filter by UCSD alum)
- Talk to friends, family, dormmates, instructors
- ... and your bosses from prior jobs/internships
- *Most jobs obtained via referrals from connections*
- *Take advantage of your **.edu** student email address!*
- Also use your personal connections to critique your portfolio, resume, LinkedIn page, and cover letters

# Portfolio + connections -> **internships**

- Basic interview prep: walk thru portfolio w/ friends
- Lots of interview prep resources<sup>[1]</sup>
- Ideally put internship work in your portfolio<sup>[2]</sup>
- If you can't get internships, ***spend your summers building your portfolio in any way you can***
  - One of my TAs (Rajiv) spent a summer as a DoorDash food delivery driver and then wrote a case study redesigning the DoorDash driver app; brilliant user research on himself!

[1] e.g.,: [A Guide to Interviewing for Product Design Internships](#)

[2] even if you can't, then you can still talk through your design process at a high level during job interviews

Looking for a full-time job ***is*** a full-time job.

Apply broadly, and don't worry if you don't exactly match the job description. It's free to apply!

Design job descriptions can be vague and not exactly what hiring managers are looking for, so it's worthwhile to still apply in case someone is looking for your skills.

Looking for a full-time job ***is*** a full-time job.

Don't have your heart set on any one specific place; successful applicants apply to dozens of jobs.

Keep track of applications using spreadsheet, take time to customize your resumes/cover letters

Looking for a full-time job **is** a full-time job.

Do EVERYTHING YOU CAN to get an employee at each company to give you a referral or to send your name and resume to recruiters.

*Most job openings prioritize referrals!*

# Company size:

*In general, smaller company -> more varied roles<sup>[1]</sup>*

- N=1 (freelancer): ++flexibility, --uncertainty
- N=tiny (startup): +variety, +growth, -uncertainty
- Small-ish design agency: work directly with clients<sup>[2]</sup>
- In-house designer at big company: more fixed roles<sup>[3]</sup>

[1] e.g., a designer at a startup may do needfinding, front-end coding, and even marketing

[2] Your scope of work is still limited by agency rules. Not as much freedom as freelancing, but more stability.

[3] Except when they don't have much experience with design roles. Then you'll have to do a bit of everything.

# Looking beyond the usual tech companies ...

Retail & logistics companies

Healthcare I.T.

Government I.T. agencies

Government contractors

Federal science labs

Nonprofits / design for social good

*(HCI/UX/Design skills are in demand but these sectors can't attract the most experienced designers. You can make a big impact as a new hire!)*

# Looking beyond pure design jobs ...

- In 2015, 93% of surveyed designers said ***coding was important*** (in 2005, ~5% would've said so)<sup>[1]</sup>
- Ideal ratio: 1 designer for every 5 programmers
- Reality: 1 designer every 10-30 programmers<sup>[2]</sup>
- A good adjacent role is ***front-end developer***
  - Build up your design portfolio on the side while working and learn from designers on your team; transition to design later
  - Many places still don't value design but do value programming; it's your chance to sneak design thinking into your workplace!

[1] [John Maeda, https://designintechreport.wordpress.com/2015/03/15/design-in-tech-report-2015/](https://designintechreport.wordpress.com/2015/03/15/design-in-tech-report-2015/)

[2] there are far more programming jobs than design jobs!



# What if you can't find a full-time job right away?

One idea: do freelance or contract design jobs ...

- to make some money from part-time work
- to build up your ***portfolio*** and ***connections***
  - which will improve your odds of landing a full-time job
  - Employers tend to value real-world work experiences more than class/school projects
- (find these via personal connections or online postings)

Outline for rest of talk:

Kinds of HCI/UX/design jobs

How to get one out of college

**What about grad school?**

Should you go to graduate school ...

*... to get a master's degree in HCI/Design?*

- NO - if you already have good portfolio/internships
- NO - if you can already get a design job from college
- MAYBE - if your major is far away from HCI/Design
- MAYBE - if you want to be a design teacher
- YES - if you don't have a strong portfolio yet
- YES - if you can afford the tuition and time
- YES - if you want to be a UX Researcher

# Should you go to graduate school ...

*... to get a Ph.D. degree in HCI/Design?*

- NO - if you're aiming for *most* design-related jobs
  - (hired at same or slightly-higher level than bachelors/masters)
- MAYBE - if you want to be a UX Researcher
- YES - if you want to be a university professor
- YES - if you want to be a research scientist
  - (despite the similar-sounding job title, research scientists do more open-ended and exploratory work than UX Researchers)
- YES - if you want to be a data scientist

Recap: how do you get an HCI/UX/Design job out of college?

Build up a design ***portfolio***, lean hard on personal and alumni ***connections***, and get a design ***internship*** while in college.

Many students & alumni wished they had learned what's in this talk ***at the beginning of college.*** Because all of this takes lots of time to prepare. Start early!

Parting Thoughts:

# **BUILD YOUR OWN TIME MACHINE**

([my youtube video](#))



Parting Thoughts:

# **BUILD YOUR OWN TIME MACHINE**

([my youtube video](#))

To travel into your possible future, proactively seek out people who are 3, 5, or up to 10 years ahead of you in life. Learn what they've done so far and *what they think they should've done differently.*



Parting Thoughts:

# **BUILD YOUR OWN TIME MACHINE**

([my youtube video](#))

Talking to these people will give you the ***superpower*** to make decisions today that will create your best possible future. If you wait until you're their age, it will be *much, much harder* to alter your path.

# Summary of HCI/UX/Design jobs

User Research	UX ( <b>U</b> ser <b>eX</b> perience) Researcher
Personas/Storyboards	PM (Product/Project) Manager
Paper Prototyping	UX/Product Designer
Digital Mock-Ups	Visual Designer
Interactive Prototypes	UX/Product Designer, UX Architect, UX Prototyper, Interaction Designer
User Testing	UX Researcher
Online Experiments	UX Researcher Data Scientist
Final Web/Mobile App	Front-end Developer, Product Engineer, Software Engineer

# Appendix A: Suggested Job-Related Resources

[How To Find a Job or Graduate School in Human-Computer Interaction, Interaction, or Industrial Design](#), by Don Norman

[Use Human-Centered Design for your Resume](#), by Don Norman

[Cracking the PM Interview: How to Land a Product Manager Job in Technology](#)

[College Students, Product Manager is the Best Job You Never Heard Of](#) (blog post)

Christi's suggestion: "I'd also suggest people set up passive job post search digests on Linked-In, Glassdoor, Indeed, etc. Once you set one up for your search terms, i.e. 'UX Designer,' then every day (or whatever frequency you set) a digest will land in your inbox so you can see what's out there."

Very detailed [2013 survey of 1000 HCI/UX professionals](#) by Nielsen Norman Group

# Appendix A: Suggested Job-Related Resources

[Rajiv Sancheti's advice on design portfolios, resumes, and job hunting](#) (Nov 2019)

[The spectrum of design roles in 2018](#)

[Design Better by InVision](#)

Example design portfolios: [Cofolios](#) and [Bestfolios](#)

From David:

- Another book I found useful for design interviews (in particular, whiteboard challenges): Solving Product Design Exercises (by Artiom Dashinsky)
- Books related to Product Manager jobs (see next slide): Inspired (by Marty Cagan), Value Proposition Design (Strategyzer)

# Appendix B: PM (Product Manager) jobs, from Anvisha Pai in 2018

- Most companies **don't** hire new grad PMs. The few that do tend to be larger - Google, Facebook, Uber, Dropbox & Yelp have Associate PM (APM) programs.
  - If you want to do PM at a smaller company, you probably need a personal connection with the company or to join a startup in an engineering/operations role and try to get promoted within 2-3 years.
  - IMO, the best route is to do the big company gig to start! Being a PM at a startup is very hit or miss as a first job.
- Similarly, there are very few PM internships. The notable one is Google APM, but it's very competitive so a software or design internship would be a good alternative.
- Given the lack of internships, good ways to tee up yourself for a PM role are...
  - Technical / coding skills. Bunch of places will have a technical / algorithm interview
  - Leadership roles or projects on campus that show initiative and creativity
- If you want to start a startup or be a CEO someday, PM is a good path to go down. Though by no means the only way!

# Presentation history

2019-11-26: v6, given in UCSD COGS1

2018-11-27: v5, given in UCSD COGS1

2018-05-29: v4, given in UCSD COGS1

2018-03-07: v3, given in UCSD COGS1

2017-12-05: v2, given in UCSD COGS1

2017-11-27: v1, first prototype, given in UCSD COGS120/CSE170

# Other suggestions

Sean: “Perhaps this is outside of the scope of this talk, but it might be interesting to see what an HCI/Design career path looks that so that students can get an idea of where their journey leads.”

Add examples of successful student portfolios, and maybe what kinds of jobs they led to

Christi: “Slide Idea: I think it would be helpful to have a slide on how to go about looking for jobs and internships: where to look, what resources on campus are available, how to reach out to alums, where to find jobs online, etc.”