My CAREER journey

What to do (and not to do) when you're applying for a CAREER award…

Hello! I'm Bart!

Current: Clemson University

- Associate Prof. in Human-Centered Computing

UC Irvine

- PhD in Informatics (privacy)

Carnegie Mellon

- M in Human-Computer Interaction

TU Eindhoven

- Researcher & Teacher
- MS in Human-Technology Interaction (recommender systems)
- BS in Innovation Sciences

Before my CAREER journey…

Started at Clemson in 2015

- Samsung gift + NSF EAGER: Usable privacy for IoT
- US Army contract: Privacy for training systems
- Facebook fellowship student: User-tailored privacy

Wanted to get back into (funded) recommender systems research

- NSF CRII: Recommender Systems for Self-Actualization

NSF CRII…

General idea: Recommender Systems mistakenly assume that your preferences are known

- Problem: Many people often don't know what they really want
- Solution: Subvert recommendation algorithms to help users explore their preferences

First submitted to the ACM RecSys "Past, Present, Future" track

Included a "beyond the CRII award" section that became my CAREER proposal

- Focused on algorithmically generated preference visualizations and preference communities

NSF CAREER: first try (2018)

Take a topic you're passionate about

- I had advocated for user-centric research in this field for a decade

Present a bold idea that covers a gap in existing work

- I selected a "High risk, high reward" idea

Make a meaningful theoretical contribution

- NSF CRII and RecSys had accepted the theoretical foundation

NSF CAREER: first try (2018)

Meaningfully integrate your education plan with your research

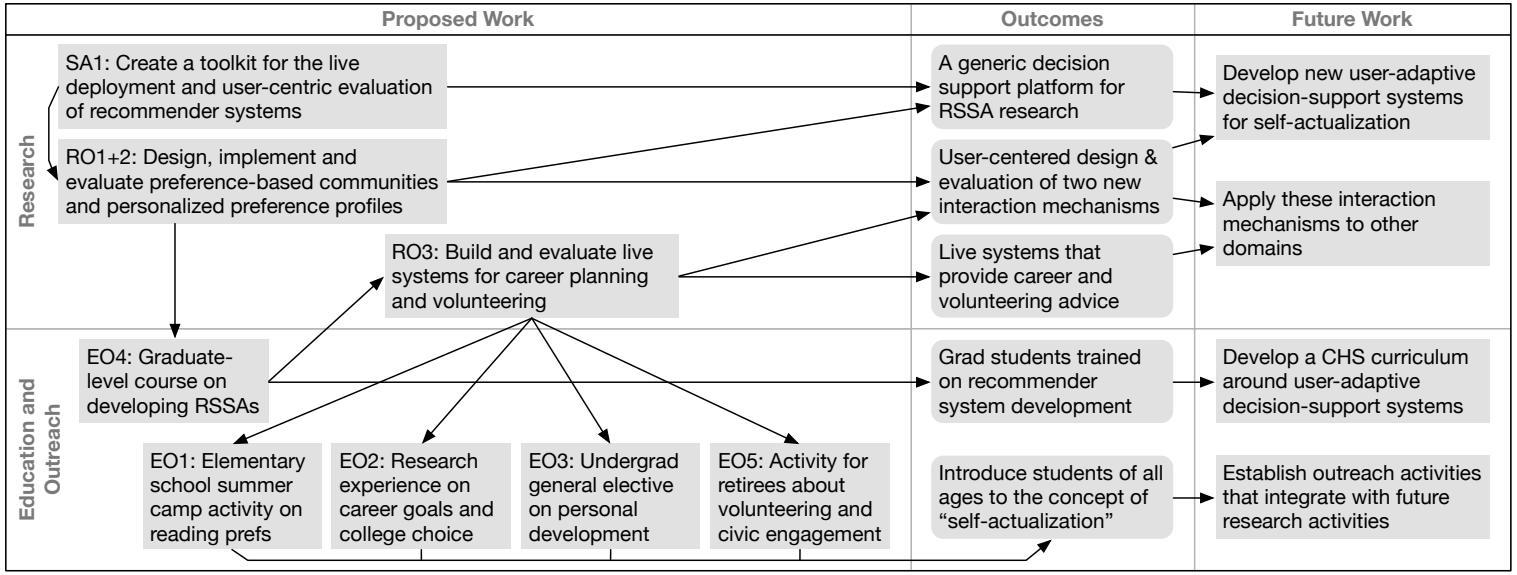

Figure 1: Overview of proposed research, education, and outreach objectives; expected outcomes; and future work.

Your education plan can go beyond the college classroom

My plan included K-12 summer camps, high school visit days, undergrad and graduate education, and working with retirees

NSF CAREER: first try (2018)

Make it internally consistent

Reviewers love it when a plan comes together!

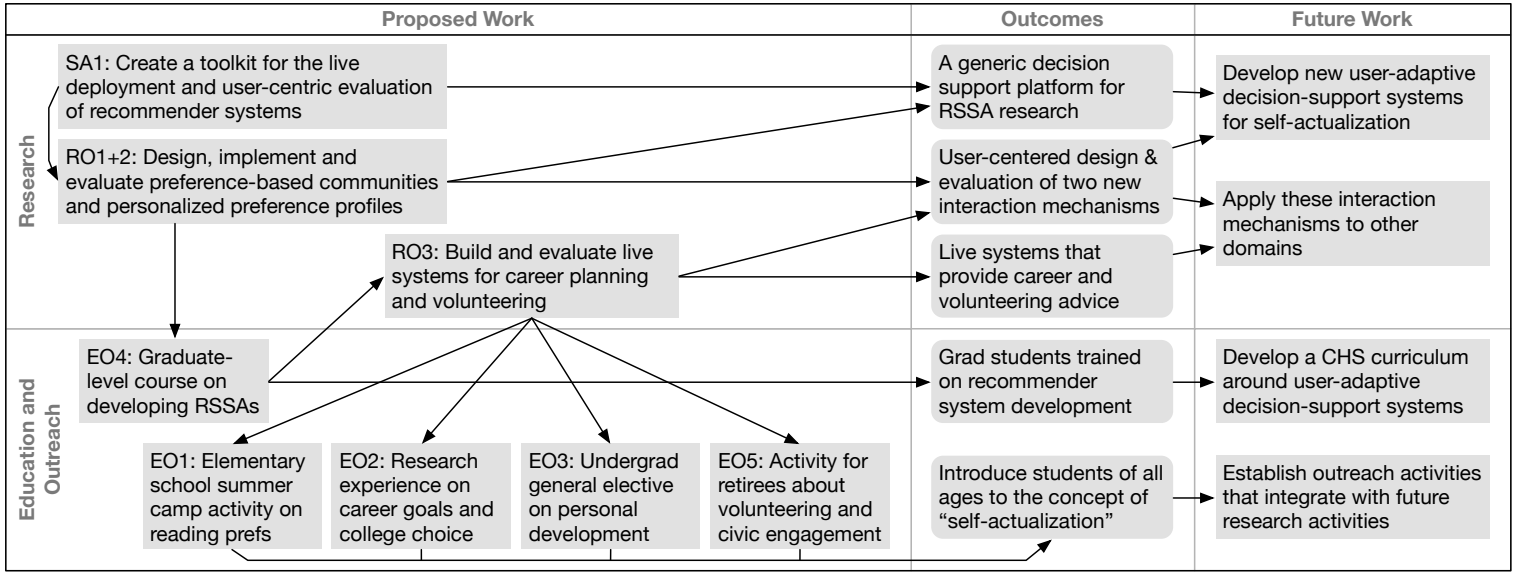

Figure 1: Overview of proposed research, education, and outreach objectives; expected outcomes; and future work.

Plan for 5 years, but write for 10

I included examples of future work beyond the CAREER award, showing how it would kickstart my research career

NSF CAREER: first try (2018)

Verdict: Low Competitive (VG/G, G, P)

Main issues:

- Not enough engagement with prior work in the broader field
- Internal inconsistencies in the theoretical foundation
- CRII award has not produced a lot of concrete results
- Best reviewer: “This is a strong proposal. The Spice Girls quote was distracting and unnecessary.”

NSF CAREER: second try (2019)

Talk to lots of different people about your proposal

- I asked outsiders, senior scholars for comments on the proposal + reviews

Delve into the theory

- I theoretically reconceptualized the proposal without changing the broader ideas / specific tasks

Turn a weakness into a positive

- I acknowledged the lacking CRII results and proposed a solution

NSF CAREER: second try (2019)

In checking on my proposal, I noticed something weird…

- Division: Office of Advanced Cyberinfrastructure (OAC)
- Proposals get moved sometimes… maybe ask why?

Turns out our pre-awards office had submitted the proposal to the **wrong directorate**!

Verdict: Low Competitive **again** (G, G, G/F, VG, F)

- Not terrible, given the circumstances

NSF CAREER: third try (2020)

Triple-check whether your proposal is submitted correctly

- Seriously…

If you're confident about it, don't change it

- In this round I mostly clarified reviewer misconceptions

NSF CAREER: third try (2020)

Verdict: Highly Competitive! (E, VG/G, G)

It got awarded!

Once you get the award…

Create a team of students

I aim to create an environment where students learn more from each other than from me

Find creative solutions for things that don’t work out

As the pandemic continued, I made several changes to my research approach

Don’t ignore interesting research rabbit holes

I do cool spin-off projects aligned with the interests of my students and favorite colleagues

Once you get the award…

Submit supplementary award proposals

I didn’t do REU/RET for this project (yet), but got a CLB

Share your proposal with others

I still do this, despite some negative experiences

Thank you!

Proposal tips:

- Take a topic you're passionate about
- Present a bold idea that covers a gap in existing work
- Make a meaningful theoretical contribution
- Meaningfully integrate your education plan with your research
- Your education plan can go beyond the college classroom
- Make it internally consistent
- Plan for 5 years, but write for 10
- Talk to lots of different people about your proposal
- Delve into the theory
- Turn a weakness into a positive

Post-award tips:

- Create a team of students
- Find creative solutions for things that don't work out
- Don't ignore interesting research rabbit holes
- Submit supplementary award proposals
- Share your proposal with others

Feel free to email me at bartk@clemson.edu!