

# JOHN FRENS

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## EDUCATION

University of Washington, Seattle WA **2016 – Present**  
**PhD in Human Centered Design and Engineering** **Expected 2021**  
**MS in Human Centered Design and Engineering** **Expected 2018**

Carnegie Mellon University, Pittsburgh PA **2010 – 2014**  
**BS in Computer Science**  
Additional Major: Psychology  
Minor: Human-Computer Interaction

## RESEARCH EXPERIENCE

University of Washington, Seattle WA **2016 – 2018**  
**Research Assistant & Independent Study – Prosocial Computing Lab**

Utilized experimental and qualitative approaches to improve the quality of interactions in homework Question & Answer websites. Researched and designed a criteria-based feedback intervention to promote quality answers. Developed an Amazon Mechanical Turk human intelligence task (HIT) server and database in Python/MySQL.

**Research Assistant & Group Leader – Human Centered Data Science Lab** **2017 – 2018**

Studied mentorship in online fanfiction writing communities using a data science approach. Implemented the measure of textual lexical diversity (MTLD) in Python and performed a longitudinal statistical analysis on 61.5 billion words of fanfiction content. Organized and led the Fanfiction Data Analytics directed research group.

Carnegie Mellon University, Pittsburgh PA **2012**  
**Technical Intern – Quality of Life Center**

Implemented DIY-friendly Application-Program Interface (API) for “Romibo,” an Autism therapy robot using Arduino.

## TEACHING EXPERIENCE

University of Washington, Seattle WA **2018**  
**Teaching Assistant – HCDE 300**

Taught fundamental HCDE concepts to HCDE undergrads. Led a weekly class session with 20 students.

University of Washington, Seattle WA **2017**  
**Teaching Assistant – HCDE 310**

Taught Python to HCDE undergrads. Gave quality feedback on code and mentored a section of 31 newbie developers.

## PROFESSIONAL EXPERIENCE

Microsoft, Redmond WA

### **Software Engineer**

**2014 – 2016**

Collaboratively developed interoperable platforms, Android Bridge for Windows and iOS Bridge for Windows. Engineered major changes to the Android Open Source Project (AOSP). Debugged process lifetime management issues in between-OS interoperation.

Implemented numerous libraries and features and reviewed the work of other engineers. Gained in-depth understanding of fundamental engineering practices as well as Java, C++, Objective-C, Android, iOS, and Windows.

### **Intern**

**2013**

Prototyped 2d and 3d visualization tools for Windows Phone in C++/C#.

Tresys Inc, Columbia MD

### **Software Engineer Intern**

**2011**

Developed open source logging libraries for Red Hat Linux in C.

## SERVICE

CSCL Conference Reviewer, Seattle WA

**2018**

HCDE Master's Application Reviewer, Seattle WA

**2018**

CHI Conference Reviewer, Seattle WA

**2017**

Carnegie Mellon Emergency Medical Service, Pittsburgh PA

**2010 – 2014**

Responded to medical emergencies and instructed CPR classes.

## CONFERENCE PAPERS

**Frens, J.,** Walker, E., Hsieh, G., Supporting Online Q&A Answering with Feedback. Under submission.

**Frens, J.,** Davis, R., Lee, J., Zhang, D., Aragon, C., From Absence to Abundance: The Effects of Distributed Mentoring on Lexical Diversity in Fanfiction. Under submission.

Davis, R., **Frens, J.,** Sharma, N., Aragon, C., Does Dunbar's Number Apply to Mentoring Communities? An Analysis of 177 Million Fanfiction Reviews. Under submission.