Dylan Wootton
Data Visualization Engineer

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Education

PhD / **Computer Science** — MIT **/ Present**
Certificate **UX Interaction Design** — Nielson Norman Group **/ Oct 2020**
BS / **Bioengineering;** Minor / **Computer Science** — University of Utah / **3.92 / May 2019**

Work Experience

Microsoft — Software Engineer

September 2019 - August 2021, Redmond, Washington

- Front-end engineer for analytics portal **used by 500 engineers to make decisions** on Chromium Browser's product health (600M total users)
- Evangelized new features in org-wide learning sessions, resulting in **+15% feature usage**
- Restructured the sites Information Architecture through mixed-methods approaches, resulting in broader use of features and quicker access to data
- Created the visualizations **used by the leadership team** to make build-releasing decisions
- Built a user-experience research strategy for the portal, resulting in higher satisfaction rates, faster bug-to-fix times, and more feature usage
- Managed intern resulting in successful project and full-time offer, onboarding mentor for 3 FTEs
- Optimized the CI-CD pipeline resulting **in a 20% reduction in time** for PR deployments

Visualization Design Lab — Visualization Researcher

March 2018 - Present (Part-time Volunteer), Salt Lake City, Utah

- Conducted research on 4 projects, resulting in **5 publications** (2 papers, 1 journal submission, and 2 award winning posters) at top visualization conferences
- Led the development of an interaction trace vis tool, reVISit. reVISit **revealed novel user interaction patterns** for network visualizations **improving interaction design and reducing time-to-insight**
- Built tools for overlaying multivariate datasets revealing socioeconomic bias in a primary data. Created a 5-person initiative to correct this bias resulting in **60% reduction of uncertainty**
- Leveraged signal processing algorithmic approaches to **recommend interesting visualization states**
- **Developed a new visualization technique** – the contextual Temporal Ordered Spatial Matrix – receiving best poster HM awards at the IEEE VIS and EUROVIS conferences.

Volunteer

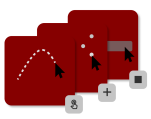
Out for Undergraduate (O4U)

December 2018 - Present

- Head fundraiser for the LGBTQ+ in tech conference, **led team of 4 to raise 525K** to support LGBTQ student development (**60% higher than expected** sponsorship)
- Conducted analysis on admission data, reports used by the O4U board to make decisions on conference admission priorities and strategic initiatives

Selected Projects

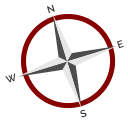
reVISit



Visualization tool for analyzing how users interact with complex visualizations. Front end in D3, Material UI, and React. Flask, MySQL, and Python backend. Project submitted for publication to ACM CHI 2021.

Demo: https://cutt.ly/Wootton-reVISit
Tool: https://revisit-analytics.github.io/reVISit

Arctic Explorer



Visualization tool built for Arctic researchers for analyzing Arctic ice data. Development includes data pipelining (MatLab), spatial-temporal visualization viewer, and global trend viewer (D3). Awarded honorable mention at IEEE VIS.

Demo: https://cutt.ly/Wootton-Arctic
Tool: www.dylanwootton.com/Arctic-Explorer

Project information can be found at dylanwootton.com. Code can be found on my **contributions** at github.com/dwootton