

# Rebecca Faust

Postdoc  
Department of Computer Science  
Virginia Tech

*Email:* rfaust@vt.edu  
*Web:* rjfaust.github.io

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## Research Interests

- Data Visualization, Exploratory Data Analysis

## Education

PhD in Computer Science	Aug. 2016 - Dec. 2021
M.S. in Computer Science	Aug. 2016 - May 2020
University of Arizona	Tucson, AZ
Advisor: Carlos Scheidegger	
Dissertation: “A Visualization First Perspective on Understanding Program Behavior”	
Bachelor of Science in Computer Science	Aug. 2012 - May 2016
Bachelor of Arts in Mathematics	Aug. 2012 - May 2016
University of Montana	Missoula, MT
GPA: 3.94, High Honors	

## Publications

- H. Han, **R. Faust**, B. Norambuena, R. Prabhu, T. Smith, S. Li, and C. North. *Explainable Interactive Projections for Image Data*. To appear in: International Symposium on Visual Computing, 2022.
- **R. Faust**, C. Scheidegger, K. Isaacs, W. Bernstein, M. Sharp, C. North. *Interactive Visualization for Data Science Scripts*. To appear at: Symposium on Visualization in Data Science (VDS) at IEEE VIS 2022.
- **R. Faust**, D. Glickenstein, C. Scheidegger. *DimReader: Axis Lines that Explain Non-linear Projections*. IEEE Transactions on Visualization and Computer Graphics (Proceedings of IEEE VIS 2018, 25.7% acceptance rate)

## Honors and Awards

Computing Innovations Postdoctoral Fellowship	Jan. 2022 - Present
NIST GMSE Fellowship	May 2018 - Dec. 2021
University of Arizona Computer Science Graduate Teaching Award	May 2021
University of Arizona Computer Science Graduate Research Award	May 2019
Galileo Circle Scholar	May 2018
University of Arizona Graduate Fellowship	Aug. 2016
Mortar Board Outstanding Senior Award in Computer Science	May 2016
Mortar Board Outstanding Senior Award in Mathematics	May 2016
Montana University System Scholarship - full tuition waiver	Aug. 2012 - May 2016
University of Montana Honors Scholarship	Aug. 2012 - May 2016

## Teaching

<b>Instructor - University of Arizona</b>	Summer 2020, Summer 2021
<ul style="list-style-type: none"><li>• CSc 245 - Introduction to Discrete Structures (Remote/Online) Instructed a class of about 60 students. The course was taught fully online.</li></ul>	

## Talks

- “DimReader: Axis Lines that Explain Non-Linear Projections”, IEEE VIS Conference, Berlin, Germany, October 23, 2018
- “A Visualization First Perspective on Understanding Program Behavior”, Colloquium at University of Montana, November 30, 2021
- “Interactive Visualization for Data Science Scripts”  
Symposium on Visual Data Science at IEEE VIS 2022, October 16, 2022

## Professional Activities

Reviewer   IEEE VIS 2022, Computer Graphics and Applications 2022  
Computer Graphics and Applications 2022  
InfoVis 2020, VAST 2020, EuroVis 2020, TKDE 2020  
InfoVIS 2019, EuroVis 2019

## Department Service

Treasurer & Founding Member	Sept. 2018 - May 2020
Graduate Student Council	
University of Arizona Computer Science Department	
Graduate Student Member	Mar. 2018 - May 2018
Department Head 5-year Review Committee	

Graduate Student Member

Sept. 2019 - Feb. 2020

Computer Science Department 7-year Academic Program Review Committee

## **Professional Experience**

### **Virginia Tech**

Postdoctoral Researcher

Mentor: Dr. Chris North

*Interests:* Visual explanation in interactive projections

Blacksburg, VA

Jan. 2022 - Present

### **Engineering Laboratory, NIST**

GMSE Summer Fellow

Supervisor: Dr. William Bernstein

*Research topic:* Visual Debugging for data science programs

Gaithersburg, MD

Summer 2018, Summer 2019

### **Agile Data Solutions**

Software Testing and Development

*Role:* Testing and front end development of content categorization software

Missoula, MT

May 2014 - Dec. 2015

## **Computer Skills**

**Programming Languages:** Python, Javascript, HTML, C/C++, SQL, C#, R

**Libraries and Tools:** Numpy, Scikit learn, D3, Vega-lite