

# Yesugen Baatartogtokh

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## Education

**Smith College**, Northampton MA Sep 2019 - May 2023  
B.A, Computer Science with Highest Honors & Statistical and Data Sciences  
GPA: 3.91/4.00, Dean's List 2019—2021, Elected Sigma Xi  
Thesis: "Aiding Users in Requirements Analysis Tasks through Color and Filtering",  
advised by Dr. Alicia M. Grubb

## Awards

NORD/LB Student Travel Award (€500) to attend RE 2023  
Smith College McKinley Honors Fellowship (\$2,770) to fund senior honors thesis - 2022  
Smith College Tomlinson Memorial Fund (\$1,000) to cover expenses of senior honors thesis - 2022  
Student Mentoring Workshop Award (\$1,000) to attend ICSE 2022

## Research Experience

**Smith College – Department of Computer Science** Oct 2023 –Present  
Postbaccalaureate Research Affiliate

- Co-facilitated a simulation study on goal modeling's impact on decision-making, emphasizing color visualization.
- Designed an enhanced external replication study to further validate the findings of my undergraduate thesis.

**University of Toronto – Department of Computer Science** June 2023–Present  
Visiting Postbaccalaureate

- Developed a case study for a responsible healthcare AI system.
- Captured natural language normative requirements into formal rules using SLEEC-DSL.
- Coordinated with non-technical stakeholders to consolidate 233 normative requirements from nine case studies.

**Smith College – Department of Computer Science** Jan 2021 –May 2023  
Undergraduate Research Assistant

- Enhanced the BloomingLeaf goal modeling tool by extending and validating color visualization and filtering features.
- Worked with team to refactor BloomingLeaf frontend to Backbone.js.
- Mentored new members in goal modeling, codebase and review process, and agile development.

## Other Experience

**Smith College – Department of Mathematical Sciences** Sep 2021–May 2023  
Teaching Assistant

- Evaluated assignments and projects in Calculus I-III.
- Provided feedback on student work and answered course-related questions.

**Smith College – Department of Computer Science** Jan 2022–May 2022  
Grader

- Graded assignments for an Introduction to Programming course in Python.
- Provided formative near-peer feedback on code quality and style.

## Journal Articles

### In Progress

- [CV-1] Yesugen Baartartogtokh, Irene Foster, and Alicia M. Grubb. The Role of Color in Decision-Making with Goal Models: A Dual Investigation through Experiment and Interview. In *Requirements Engineering Journal (REJ)*, Expected completion date: 2023

## Conference Papers

### Published

- [CV-2] Yesugen Baartartogtokh, Irene Foster, and Alicia M. Grubb. An Experiment on the Effects of Using Color to Visualize Requirements Analysis Tasks. In *Proceedings of the IEEE 31st International Requirements Engineering Conference (RE)*, pages 146–156, 2023. Acceptance rate: 23.9%  
Supplemental Material: <https://doi.org/10.35482/csc.002.2023>
- [CV-3] Yesugen Baartartogtokh, Irene Foster, and Alicia M. Grubb. Visualizations for User-supported State Space Exploration of Requirements Models. In *Proceedings of the IEEE 31st International Requirements Engineering Conference (RE)*, pages 281–286, 2023. Acceptance rate: 39%  
Supplemental Material: <https://doi.org/10.35482/csc.003.2023>

### Under Review

- [CV-4] Nick Feng, Lina Marsso, Sinem Getir Yaman, Yesugen Baartartogtokh, Reem Ayad, Victória Oldemburgo de Mello, Beverley Townsend, Isobel Standen, Ioannis Stefanakos, Calum Imrie, Genafina Nunes Rodrigues, Ana Cavalcanti, Radu Calinescu, and Marsha Chechik. Analyzing and Debugging Normative Requirements via Satisfiability Checking. In *Proceedings of the 46th ACM International Conference on Software Engineering (ICSE)*, 2024

## Other Peer Reviewed Contributions

### Published

- [CV-5] Yesugen Baartartogtokh and Irene Foster. Visualizations and Filtering to Help People Find their Path. In *Proceedings of the 54th ACM Technical Symposium on Computer Science Education (SIGSCE)*, page 1239, 2023

## Talks

- An Experiment on the Effects of using Color to Visualize Requirements Analysis Tasks
- Proceedings of the IEEE 31th International Requirements Engineering Conference (RE), Research Track, Hannover, Germany, September 2023
- Visualizations for User-supported State Space Exploration of Requirements Models
- Proceedings of the IEEE 31th International Requirements Engineering Conference (RE), RE@Next! Track, Hannover, Germany, September 2023

## Posters

- Yesugen Baartartogtokh and Irene Foster. Visualizations and Filtering to Help People Find their Path. In *Proceedings of the 54th ACM Technical Symposium on Computer Science Education (SIGSCE)*, page 1239, 2023
- Yesugen Baartartogtokh, Irene Foster, Venus Nguyen, and Thu Tran. Implementing Intention Filtering and EVO in Next State. In *Celebrating Collaborations at Smith College*, 2022
- Kathleen Hablutzel, Ali Eshghi, Ester Zhao, Isabella Brody-Calixto, Yanning Tan, and Yesugen Baartartogtokh. Restructuring Model Analysis Features to Support Multiple Analysis Configurations in BloomingLeaf. In *Celebrating Collaborations at Smith College*, 2021