Yesugen Baatartogtokh

Department of Computer Science Smith College Northampton, MA, United States 01060 Web: https://yesugenb.github.io/ e-mail: ybaatartogtokh@smith.edu

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

Under Review

[CV-1] Yesugen Baatartogtokh, Irene Foster, and Alicia M. Grubb. A Splash of Color: A Dual Dive into the Effects of EVO on Decision-Making with Goal Models. In *Requirements Engineering Journal* (**REJ**), Expected Publication Date: 2024

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Conference Papers

Published

- [CV-2] Yesugen Baatartogtokh, 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 Baatartogtokh, Irene Foster, and Alicia M. Grubb. Visualizations for User-supported State Space Exploration of Requirements Models. In *Proceedings of the IEEE 31th International Requirements Engineering Conference* (RE), pages 281–286, 2023. Acceptance rate: 39% Supplemental Material: https://doi.org/10.35482/csc.003.2023
- [CV-4] Nick Feng, Lina Marsso, Sinem Getir Yaman, Yesugen Baatartogtokh, Reem Ayad, Victória Oldemburgo de Mello, Beverley Townsend, Isobel Standen, Ioannis Stefanakos, Calum Imrie, Genaina Rodrigues, Ana Cavalcanti, Radu Calinescu, and Marsha Chechik. Normative Requirements Operationalization with Large Language Models. In 32nd IEEE International Requirements Engineering (RE), 2024

Under Review

[CV-5] Nick Feng, Lina Marsso, Sinem Getir Yaman, Isobel Standen, Yesugen Baatartogtokh, Reem Ayad, Victória Oldemburgo de Mello, Beverley Townsend, Hanne Bartels, 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-6] Yesugen Baatartogtokh 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 Baatartogtokh 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 Baatartogtokh, 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 Baatartogtokh. Restructuring Model Analysis Features to Support Multiple Analysis Configurations in BloomingLeaf. In *Celebrating Collaborations at Smith College*, 2021