

Ali Baigelenov

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<http://abaigele.github.io>

EDUCATION

Ph.D. in Technology – Purdue University | May 2026

Advisor: Dr. Paul Parsons

Dissertation: “Inspiration in Visualization Design: Perception, Discourse, and Epistemic Mediation”

M. S. in Computer Graphics Technology – Purdue University | December 2017

Advisor: Dr. Paul Parsons

Thesis: “Interactivity Factors in Visualization-Based Exploratory Search”

B. S. in Computer Graphics Technology – Purdue University | December 2015

PROFESSIONAL APPOINTMENTS

Senior Lecturer - SDU University, Kazakhstan | January 2024 - Present

Faculty of Engineering and Natural Sciences

Department of Computer Science

RESEARCH INTERESTS

information visualization; human-computer interaction; human-AI interaction; human-information interaction; design cognition; design theory; applied cognition and perception; human-centered design

PUBLICATIONS

My name appears in bold. All publications listed are peer-reviewed.

Full papers

1. **Baigelenov, A.**, Shukla, P., Bui, P., and Parsons, P. (Accepted, to appear at CHI 2026). Talking Inspiration: A Discourse Analysis of Data Visualization Podcasts.

2. **Baigelenov, A.**, Shukla, P., and Parsons, P. (2025). How Visualization Designers Perceive and Use Inspiration. In *CHI Conference on Human Factors in Computing Systems (CHI '25), April 26-May 1, 2025, Yokohama, Japan*. ACM, New York, NY, USA, 12 pages.
<https://doi.org/10.1145/3706598.3714191>

Short papers and Extended abstracts

1. **Baigelenov, A.**, Shukla, P., Zhang, Z., and Parsons, P. (2025). Are Cognitive Biases as Important as they Seem for Data Visualization?. In *Extended Abstracts of the CHI Conference on Human Factors in Computing Systems (CHI EA '25), April 26-May 1, 2025, Yokohama, Japan*. ACM, New York, NY, USA, 7 pages. <https://doi.org/10.1145/3706599.3719926>
3. Shukla, P., Bui, P., Levy, S., Kowalski, M., **Baigelenov, A.**, and Parsons, P. (2025). De-skilling, Cognitive Offloading, and Misplaced Responsibilities: Potential Ironies of AI-Assisted Design. In *Extended Abstracts of the CHI Conference on Human Factors in Computing Systems (CHI EA '25), April 26-May 1, 2025, Yokohama, Japan*. ACM, New York, NY, USA, 7 pages. <https://doi.org/10.1145/3706599.3719931>
4. Parsons, P., Gray, C. M., **Baigelenov, A.**, & Carr, I. (2020). Design judgment in data visualization practice. In *2020 IEEE Visualization Conference (VIS)* (pp. 176-180). IEEE.
5. Parsons, P., **Baigelenov, A.**, Hung, Y. H., & Schrank, C. (2020). What Design Methods do DataVis Practitioners Know and Use?. In *Extended Abstracts of the 2020 CHI Conference on Human Factors in Computing Systems* (pp. 1-8).
6. **Baigelenov, A.**, & Parsons, P. (2018). Interactivity Factors in Visualization-Based Exploratory Search. In *Extended Abstracts of the 2018 CHI Conference on Human Factors in Computing Systems (CHI EA '18)*. ACM, New York, NY, USA, Paper LBW009, 6 pages. DOI: <https://doi.org/10.1145/3170427.3188558>

Workshop and Symposium papers

1. Parsons, P. C., Shukla, P. C., **Baigelenov, A.**, & Gray, C. M. (2023). Developing Framing Judgment Ability: Student Perceptions from a Graduate UX Design Program. In *Proceedings of the 5th Annual Symposium on HCI Education* (pp. 23-32).
2. Saenz, M., **Baigelenov, A.**, Hung, Y. H., & Parsons, P. (2017). Reexamining the cognitive utility of 3D visualizations using augmented reality holograms. In *Workshop on Immersive Analytics: Exploring Future Interaction and Visualization Technologies for Data Analytics* (Immersive 2017), pp. 5.

Poster abstracts

1. Parsons, P., Hung, Y. H., & **Baigelenov, A.** (2018). Toward an Analysis of Practitioner-Oriented Resources for Visualization Design. In *IEEE VIS '18: Proceedings of the 2018 IEEE Conference on Information Visualization*, Poster Abstracts, pp. 2

2. **Baigelenov, A.**, Saenz, M., Hung, Y. H., & Parsons, P. (2017). Toward an Understanding of Observational Advantages in Information Visualization. In *IEEE VIS '17: Proceedings of the 2017 IEEE Conference on Information Visualization*, Poster Abstracts, pp. 2.

Full papers - Under review

1. Parsons, P., Agrawal, S., Bui, P., Shukla, P., and **Baigelenov, A.** (Under Review, DRS 2026). Bias Reconsidered: Ecologically Rational Heuristics in Design Cognition

PROFESSIONAL SERVICE

Organizing Committee

Workshop on Visualization for Communication (VisComm), IEEE VIS - 2025

Reviewer

ACM Conference on Human Factors in Computing Systems (ACM CHI) - 2019-2026

IEEE Visualization Conference (IEEE VIS) - 2023

IEEE Conference on Visual Analytics Science and Technology (IEEE VAST) - 2019

ACM Designing Interactive Systems Conference (ACM DIS) - 2025 (Special Recognition)

ACM Creativity and Cognition Conference (ACM C&C) - 2025 (Highly Useful Review)

Campus/Department

Quality Assurance Committee

SDU University, Kazakhstan

ABET Accreditation Preparation Committee

SDU University, Kazakhstan

Undergraduate Diploma Project Defense Committee

SDU University, Kazakhstan

AWARDS AND GRANTS

National

Kazakhstan's Governmental Scholarship "Bolashak" | January 2010

Institutional

Sriver Award | August 2018

Daniel and Martina Lewis Graduate Award | August 2018

TALKS AND POSTERS

National/International

1. "How Visualization Designers Perceive and Use Inspiration." *CHI Conference on Human Factors in Computing Systems*, Yokohama, Japan, 2025
2. Gateway Usability SGX3 Focus Week. *Science Gateways 2023 Annual Conference*. San Diego Supercomputer Center, San Diego, California, 2023

Campus/Departmental

1. Cognitive Tools: A Data-Driven Perspective. *Future Work and Learning*. Purdue University, Indiana, 2019

TEACHING

Instructor Positions, SDU University, Kazakhstan

- CSS 489: Diploma Preparation (2024, 2025)
- INF 232: Web Programming: Back End (2024, 2025, 2026)
- CSS 153: Computer Ethics: Legal, Ethical, and Societal Impacts of Computing (2024)
- CSS 410: Research Tools and Methods (2024)
- INF 228: UX/UI Design (2024)
- CSS 206: Database Management Systems I (2024, 2025)

Teaching Assistant Positions - Purdue University, IN, USA

- CGT 35300: Principles of Interactive and Dynamic Media (2021, 2022)
- CGT 35600: Web Programming, Development, and Data Integration (2021, 2022, 2023)
- CGT 45600: Advanced Web Programming, Development, and Data Integration (2022 , 2023)

Curricular Innovations

- New Courses Developed or Co-Developed
 - CSS 153: Computer Ethics: Legal, Ethical, and Societal Impacts of Computing
 - INF 228: UX/UI Design

Teaching Interests

- human-computer interaction; human-AI interaction; human-centered design; information and data visualization; user experience design; user interface design; ethics in computing; web development front and backend; database management systems

MENTORSHIP AND SUPERVISION

Meiirzhan Uristemov

Teaching Assistant, Master's Student, SDU University | March 2024 - June 2024

Merey Zhursinadilova

Undergraduate Research Assistant, SDU University | August 2025 - December 2025