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# Call for Papers: Special Issue on Visualization and Decision Making Design Under Uncertainty

CG&A seeks submissions for this upcoming special issue.

## Important Dates

**Submissions due:** 6 February 2023

**Publication:** September/October 2023

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Visualization has become a core component of any decision or risk analysis pipeline, and tools for creating visualizations are quickly becoming more and more accessible. In addition, the visual literacy of the general public has been increasing due to the pervasiveness of visualizations in everyday life. As the appetite for decision making tools grows, so does the need to convey error, confidence, missing, or conflicting data visually. However, practices around uncertainty visualization remain domain-specific, rooted in convention, and in many instances, absent entirely.

The goal of this special issue is to build a foundation of accessible, practical knowledge that practitioners and researchers alike can rely on in addressing challenges related to uncertainty in visualizations. We seek high-quality papers that highlight challenges, elucidate solutions, and provide guidelines for handling uncertainty.

Topics of interest include:

- Uncertainty visualization algorithms
- Novel encodings of uncertainty for high dimensional data
- Uncertainty visualization algorithms for ML and ML for uncertainty visualization
- Role of uncertainty visualization in decision making
- Ethical concerns for inclusion of uncertainty
- Effectiveness and efficiency of uncertainty visualization techniques
- Uncertainty awareness, communication, and trust
- Uncertainty visualization software
- HCI and design with uncertainty
- Visual expressions of uncertainty quantifications and propagation
- Application case studies using uncertainty visualization
- Perceptual issues involving uncertainty and decision making

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## Submission Guidelines

For author information and guidelines on submission criteria, please visit the *CG&A* Author Information (<https://www.computer.org/csdl/magazine/cg/write-for-us/15470?>

[title=Author%20Information&periodical=IEEE%20Computer%20Graphics%20and%20Applications](https://www.computer.org/csdl/magazine/cg/write-for-us/15470?title=Author%20Information&periodical=IEEE%20Computer%20Graphics%20and%20Applications)) page. Please submit papers through the ScholarOne system (<https://mc.manuscriptcentral.com/cs-ieee>), and be sure to select the special-issue name. Manuscripts should not be published or currently submitted for publication elsewhere. Please submit only full papers intended for review, not abstracts, to the ScholarOne portal.

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## Questions?

Contact the guest editors at [cga5-2023@computer.org](mailto:cga5-2023@computer.org) (<mailto:cga5-2023@computer.org>).

### Guest Editors

- Nadia Boukhelifa; INRAE, Paris, FR
- Chris R. Johnson; University of Utah , Salt Lake City, UT, US
- Kristi Potter; NREL, Golden, CO, US

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6 February 2023



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