

Preface: AAAI Spring Symposium on Survival Prediction - Algorithms, Challenges, and Applications 2021

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The 2021 AAAI Spring Symposium on “Survival Prediction – Algorithms, Challenges, and Application” (SPACA) was organized as a virtual event, due to the disruptions caused by the COVID-19 outbreak. SPACA 2021 brought together researchers and practitioners interested in survival prediction, with diverse backgrounds in statistics, machine learning, biomedical engineering, and mathematics, to communicate new algorithms, ideas, and applications of survival prediction in various disciplines.

In general, a survival analysis model estimates the time until a specified event will happen in the future (or some related survival measure), for an individual. This event could be the time to death or relapse of a patient, or time until an employee leaves a company, or until the failure of a mechanical system, etc. The key challenge in learning effective survival models is that this time-to-event is censored for some individuals, which limits the direct use of standard regression techniques. This symposium focused on approaches for learning models that estimate survival measures from such survival datasets, which include censored instances. Its objective was to push the state-of-the-art in survival prediction algorithms and address fundamental issues that hinder their applicability for solving complex real-world problems. A few interdisciplinary collaborations were established and new research directions were identified through paper presentations, invited talks, and discussion sessions held during the symposium.

We would like to thank all the people who have contributed to this symposium. In particular, we thank all authors who submitted their papers to SPACA 2021 and the PC members for their timely and high-quality reviews. We are grateful to AAAI symposium committee for their support. We also thank the Series Editors at Proceedings of Machine Learning Research, Professor Neil Lawrence and Dr Mark Reid, for their help in publishing the symposium proceedings. Finally, we would like to thank you, the participants of the symposium, and the readers of the proceedings. We hope you enjoyed the symposium and will enjoy the published papers.

Symposium Organization

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Mihaela van der Schaar, *University of Cambridge*

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Symposium Webpage

Recordings of the symposium paper presentations, as well as invited presentations, are available at the <https://spaca.weebly.com/> webpage.