

[To view complete details for this event, click here to view the announcement](#)

MACHINE LEARNING - ANALYSIS OF TOTAL VARIANCE

Machine learning (ML), the driving force behind most AI systems, trains models by minimizing prediction errors on a given dataset. Federated learning (FL) extends this paradigm to networks of distributed ML tasks, where each task involves a separate model and dataset. Just as empirical risk minimization is a foundational principle in ML, total variation (TV) minimization can provide a unifying framework for FL. This talk explores the mathematical structure of TV minimization and its role in designing trustworthy AI. We demonstrate how carefully chosen components of TV minimization lead to AI services that are robust, privacy-preserving, and explainable.

Alexander Jung, Associate Professor, Aalto University, Finland

<https://github.com/alexjungaalto>

HONORS AND AWARDS

Amazon Machine Learning Research Award

Palkinto tai huomionosoitus tuotoksesta Professorship Jung Alexander Jan 2018

Promotio Sub Auspiciis Res Publicae

highest academic distinction in Austria

Palkinto tai huomionosoitus urasta Professorship Jung Alexander Jun 2012

Best Student Paper Award

Palkinto tai huomionosoitus tuotoksesta Professorship Jung Alexander May 2011

Date and Time

Date: **19 Feb 2025**

Time: **09:00 AM to 10:00 AM**

All times are (UTC-07:00) Mountain Time (US & Canada)

 Add Event to Calendar



[iCal](#)



[Google Calendar](#)



Location

This event has virtual attendance info. Please visit [the event page](#) to attend virtually.

Hosts

[Boise Section Chapter, SSC37](#)

[Boise Section Chapter, C16](#)

[Contact Event Hosts](#)

Co-sponsored by Boise Computer Society / Boise Solid-state Circuits Society

Registration

Starts **20 January 2025 12:00 AM**

Ends **18 February 2025 11:55 PM**

All times are (UTC-07:00) Mountain Time (US & Canada)

No Admission Charge

[Register Now](#)

Speakers

Topic: Alexander Jung, Assoc Professor, Alto University
