

# Tsuyoshi Ide (“Ide-san”), Senior Technical Staff Member, IBM T. J. Watson Research Center



## ▪ Summary

- Ide-san, Member of IBM Academy of Technology, has 10+ years experience in applied and basic machine learning research. His major research interests include sensor data analytics. With advanced AI methods, he has successfully led many customer engagements in a variety of industries.
- He is best known as one of the leading researchers in anomaly detection. He has 50+ peer-reviewed papers with 1500+ citations in total. He is also the author of one of the best-selling textbooks in machine learning in Japan.

## ▪ Professional experience

- 2013- : IBM T. J. Watson Research Center
  - ✓ Senior Technical Staff Member, Operations Management Analytics & Solutions
  - ✓ Member of IBM Academy of Technology
  - ✓ Manager, Service Delivery & Risk Analytics (2013-2014)
- 2010-2013: IBM Research – Tokyo
  - ✓ Manager, Analytics & Optimization
- 2000-2009: : IBM Research – Tokyo
  - ✓ Researcher in data mining and display technology

## ▪ Recent work

- Customer engagements
  - ✓ Semiconductor, Oil & petroleum, mining, cement
- Papers
  - ✓ “Multi-task Multi-modal Models for Collective Anomaly Detection”, T. Ide et al., IEEE ICDM 2017.
  - ✓ “Sparse Gaussian Markov Random Field Mixtures for Anomaly Detection”, T. Ide et al., IEEE ICDM 2016.
  - ✓ “City-Wide Traffic Flow Estimation from Limited Number of Low Quality Cameras”, T. Ide et al., IEEE Trans. ITS, 2017
  - ✓ “Change Detection using Directional Statistics”, T. Ide et al., IJCAI 2016
  - ✓ "Informative Prediction based on Ordinal Questionnaire Data", T. Ide et al., IEEE ICDM 2015

## ▪ Education

- 2000: Ph.D. from University of Tokyo, Japan
  - ✓ Theoretical condensed-matter physics
- 1993: B. Eng. from Tohoku University, Japan
  - ✓ Mechanical Engineering