# Columbia DSI/TRIPODS Deep Learning Workshop

March 15, 2019

# Foundations of Data Science @ Columbia

- Center for Foundations of Data Science + Columbia TRIPODS Institute
  - Alex Andoni (CS)
  - David Blei (CS/Stats)
  - Qiang Du (APAM)
  - Daniel Hsu (CS)
  - Cliff Stein (CS/IEOR)
  - Chris Tosh (CS/DSI)
  - John Wright (EE)
  - Tian Zheng (Stats)

# Goals

- Showcase research in **foundations and applications of deep learning** at Columbia University and beyond.

- Bring together brilliant minds to identify:
  - **Research directions**
  - **Open problems**
  - **Potential collaborations**

- Build community at Columbia around common interests!

# Agenda

- 9:00-9:05: Opening remarks
- 9:05-9:35: Xuan (Sharon) Di - "Deep Learning in Transportation"
- 9:35-10:05: Maxim Topaz - "NimbleMiner: a user driven multi-lingual approach to healthcare text mining with deep learning"
- 10:05-10:35: Mingoo Seok - "Recent Advances in AI and ML Hardware Design"
- 10:35-11:00: Break
- 11:00-12:00: Matus Telgarsky - "Open problems and recent advances in deep learning theory: representation, generalization, and optimization"
- 12:00-1:30: Lunch
- 1:30-2:00: Zoran Kostic - "Tracking objects and fields in videos using deep learning"
- 2:00-2:30: Suman Jana - "Building Verifiably Secure Machine Learning Systems"
- 2:30-3:00: Break
- 3:00-3:30: Ali Hirsa - "Deep Learning & its applications in Quantitative Finance"
- 3:30-4:00: Paul Sajda - "Deep Learning for Fusion and Inference in Multimodal Neuroimaging"
- 4:00-4:30: Panel discussion (Matus Telgarsky, Suman Jana, Zoran Kostic), moderated by John Wright.

# Thanks to…

- All of the speakers!
- All of the attendees!
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