

Intel Collaborative Research Institute for Computational Intelligence

ICRI-CI 4th Retreat – “Visual” Session

Ronny Ronen May 24, 2016

ICRI-CI web-site: <http://icri-ci.technion.ac.il/>



Phase-II Research Projects (5/2016)

Visual Systems / Other 6

1. Blind Video: Video Without Photographers
Shmuel Peleg (H)
2. Saliency Estimation in Video
Ayellet Tal (T), Zelnik (T)
3. Mental Phenotyping from 3D Cameras
Daphna Weinshall (H)
4. Statistics of Depth Images
Yair Weiss (H)
5. Providing People with Arguments during Persuasive Discussion
Sarit Kraus (B)
6. Efficient Optical Flow **Lior Wolf (TA)**
7. Deep Learning for Wafer Inspection (WIP) **Ronny Ronen**

Conversation Understanding 8

1. Universal Semantics (UCCA) **Ari Rappoport (H)**
2. Automatic Measurement of Transcription Quality
Moshe Koppel (B)
3. Holistic Inference for Natural Language Processing Amir
Globerson (H)
4. Open Information Extraction Knowledge Graphs
Ido Dagan (B)
5. Unsupervised Extraction of Relations and Events
Ronen Feldman (H)
6. Hybrid Models for Minimally Supervised Information
Extraction from Conversations **Roi Reichart (T)**
7. Syntactic and Semantic Reranking of Speech Interaction
Data **Yoav Goldberg (B)**
8. Topic Dependent Language Modeling
Jacob Goldberger (B) **Moshe Wasserblat**

Optimized Deep Learning 12

1. Optimal Deep Learning & the Information Bottleneck
Principle **Naftali Tishby (H)**
2. SimNets: A Generalization of Convolutional Networks
Amnon Shashua (H)
3. Rigorous Algorithms for Distributed Deep Learning
Shai Shalev Shwartz (H)
4. Mega-Class Efficient Deep Learning **Koby Cramer (T)**
5. Outlier Robust Distributed Learning **Shie Mannor (T)**
6. Unsupervised and Semi-supervised Ensemble Learning
Boaz Nadler (W)
7. Distributed Methods for Non-Convex and Deep Learning
Ohad Shamir (W), Nati Srebro (T)
8. Distributed Deep Learning on Xeon-Phi **M. Silberstein (T)**
9. Scene Understanding: from Image to Text and from Image
and a Question to an Answer **Lior Wolf (TA)**
10. Image Restoration w/ Deep Learning **M. Zibulevsky + M.
Elad (T)**
11. Using Deep Learning to Medical Imaging
Hayit Greenspan (TA) **Shai Fine**

Optimized Intel Architecture 8

1. Memory Traffic Reduction for Big Data & ML
Uri Weiser (T), Avinoam Kolodny (T)
2. Accelerators for Big Data & Machine Learning
Ran Ginosar (T), Oded Schwartz (H)
3. Memory Intensive Architectures
Shahar Kvatinisky (T), Y. Cassuto, E. Friedman (T)
4. Context-based Prefetching using Reinforcement
Learning **Yoav Etsion (T)** **Debbie Marr**



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11:10	Visual/Other	Ronny Ronen
11:10		Ronny Ronen Session Overview
11:20		Sarit Kraus Strategical Argumentative Agent for Human Persuasion
11:45		Lior Wolf PatchBatch: a Batch Augmented Loss for Optical Flow
12:10		Yair Weiss Statistics of RGBD Images
12:35		Shmuel Peleg Calibration of Multiple Cameras using Scene Dynamics
13:00	Poster Session + Lunch	

