

# Twenty-Eighth AAI Conference on Innovative Applications of Artificial Intelligence (IAAI-16)

## Schedule

### *Saturday, February 13*

#### **AAAI-16 Opening Reception and ASU Lab Tours**

6:00 – 7:30 (Reception, Hyatt Phoenix)

6:30 – 9:30 (Lab Tours, Arizona State University)

### *Sunday, February 14*

8:30 – 8:55

#### **AAAI Welcome and Opening Remarks, AAI Organizational Awards/Honors, Senior Member Blue Sky Awards**

9:00 – 9:50

#### **AAAI Presidential Address: Thomas G. Dietterich**

10:00 – 11:00

#### **Machine Learning/Data Mining I: Tourism and Climate**

Wikipedia in the Tourism Industry: Forecasting Demand and Modeling Usage Behavior  
*Pejman Khadivi, Naren Ramakrishnan*

A Hidden Markov Model Approach to Infer Timescales for High-Resolution Climate Archives  
*Mai Winstrup*

11:30 – 12:00

#### **Application I: Software Diagnosis and Testing**

Automated Regression Testing Using Constraint Programming  
*Arnaud Gotlieb, Mats Carlsson, Marius Liaen, Dusica Marijan, Alexandre Petillon*

2:00 – 3:35

#### **Computational Sustainability**

Optimizing Energy Costs in a Zinc and Lead Mine  
*Alan Kinsella, Alan F. Smeaton, Barry Hurley, Barry O'Sullivan, Helmut Simonis*

**Deployed: Deploying PAWS: Field Optimization of the Protection Assistant for Wildlife Security**  
*Fei Fang, Thanh Nguyen, Rob Pickles, Wai Y. Lam, Gopaldasamy R. Clements, Bo An, Amandeep Singh, Milind Tambe, Andrew Lemieux*

Data-Augmented Software Diagnosis  
*Amir Elmishali, Roni Stern, Meir Kalech*

4:00 – 5:00

**IAAI-16 Invited Talk: Naveen Rao (Nervana, Inc.)**  
***Rethinking Computation: Substrates for Machine Intelligence***

5:10 – 6:10

**AAAI-16 Invited Talk: Andreas Krause (ETH Zurich)**  
***From Proteins to Robots: Learning to Optimize with Confidence***

### ***Monday, February 15***

8:50 – 9:50

**AAAI-16 Invited Talk: Susan Murphy (University of Michigan)**  
***Learning Treatment Policies in Mobile Health***

10:00 – 11:00

**Machine Learning/Data Mining II: Digital Libraries**

Document Type Classification in Online Digital Libraries  
*Cornelia Caragea, Jian Wu, Sujatha Das Gollapalli, C. Lee Giles*

MetaSeer.STEM:Towards Automating Meta-Analyses  
*Venkata Kishore Neppalli, Cornelia Caragea, Robin Mayes, Kim Nimon, Fred Oswald*

11:30 – 12:30

**Application II: Autonomous Vehicle and Challenge Paper**

An Autonomous Override System to Prevent Airborne Loss of Control  
*Sweewarman Balachandran, Ella Atkins*

*Challenge Problem Paper: Infusing Human Factors into Algorithmic Crowdsourcing*  
*Han Yu, Chunyan Miao, Zhiqi Shen, Jun Lin, Cyril Leung, Qiang Yang*

2:00 – 3:30

**Machine Learning/Data Mining III: Healthcare**

Automated Volumetric Intravascular Plaque Classification Using Optical Coherence Tomography (OCT)  
*Ronny Shalev, Daisuke Nakamura, Setsu Nishino, Andrew Rollins, Hiram Bezerra, David Wilson, Soumya Ray*

***Deployed: Deploying nEmesis: Preventing Foodborne Illness by Data Mining Social Media***  
*Adam Sadilek, Henry Kautz, Lauren DiPrete, Brian Labus, Eric Portman, Jack Teitel, Vincent Silenzio*

4:00 – 5:00

**AAAI-16 Invited Talk: Nick Bostrom (Oxford University)**  
***What We Should Think about Regarding the Future of Machine Intelligence***

5:10 – 6:10

**IAAI-16 Robert S. Engelmore Memorial Award Lecture: Reid G. Smith (i2k Connect)**  
***A Quarter Century of AI Applications: What We Knew Then versus What We Know Now***

***Tuesday, February 16***

8:50 – 9:50

**IAAI-16 / AAAI-16 Joint Invited Talk: Demis Hassabis (Google DeepMind)**

10:00 – 11:00

**Cyber Security and Ontology I: Manufacturing**

Data Driven Game Theoretic Cyber Threat Mitigation

*John James Robertson, Vivin Paliath, Jana Shakarian, Amanda Thart, Paulo Shakarian*

Automated Capture and Execution of Manufacturability Rules using Inductive Logic Programming

*Abha Moitra, Ravi Palla, Arvind Rangarajan*

11:30 – 12:30

**Ontology II: Automotive**

***Deployed: Ontology Re-Engineering: A Case Study from the Automotive Industry***

*Nestor Rychtycky, Baskaran Sankaranarayanan, P Sreenivasa Kumar, Deepak Khemani, Venkatesh Raman*