

Today's Editor: Patricia (Patti) K. Lamm, Michigan State University

Today's Topics:

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Submissions for IPNet Digest:

Mail to ipnet-digest@math.msu.edu

Information about IPNet:

<http://ipnet.math.msu.edu>

From: Jakob Jorgensen <jakob.jorgensen@manchester.ac.uk>

Subject: Invitation - Synergistic Reconstruction Symposium - Nov 2019 - Chester, UK

Date: Friday, August 23, 2019

INVITATION

Synergistic Reconstruction Symposium

3 - 6 November 2019

Chester, UK

Dear colleague,

We wish to wholeheartedly invite you to attend a two-day scientific symposium on Synergistic Image Reconstruction which will take place on the 3rd and 4th of November 2019 at the historical town of Chester (near Manchester) in the UK. The symposium will be followed by a two-day hands-on software training school on the software packages

SIRF: Synergistic Image Reconstruction Framework (<https://www.ccppetmr.ac.uk/>)

CIL: Core Imaging Library (<https://www.ccpi.ac.uk/cil>)

The event aims to bring together researchers from different scientific fields and application areas, including biomedical and industrial imaging, interested in novel methods and software for extracting multi-parametric imaging information from multiple datasets. The symposium will consist of invited talks by leading researchers and a poster session.

More information about the event and the registration procedure for both the symposium and software training school can be found at

www.synergimrecon.org

The registration deadline is on the 15th of September 2019, but space is limited so early registration is recommended.

Both events will be free of charge and a number of travel bursaries will be provided for

a number of students and post-docs who will present posters.

Kind regards, on behalf of the organisers,
Jakob Jorgensen
The University of Manchester

Chair:
Kris Thielemans, UCL

Co-chairs:
Charalampos 'Harry' Tsoumpas, Leeds
Jakob Jorgensen, Manchester
Christoph Kolbitsch, PTB
Richard Brown, UCL (software training)

Organisers:
Simon Arridge, UCL
David Atkinson, UCL
Nikos Dikaios, Surrey
Matthias Ehrhardt, Bath
Daniil Kazantsev, Diamond Light Source
Bill Lionheart, Manchester
Julian Matthews, Manchester
Claudia Prieto, KCL
Andrew Reader, KCL
Martin Turner, Manchester

From: Eric Miller <elmiller@ece.tufts.edu>
Subject: Post doctoral position: machine learning for human performance prediction
Date: Thursday, August 1, 2019

Applications are invited for a postdoctoral position in the area of machine learning and data analytics for human performance understanding and prediction, a collaborative effort at Tufts University among the Department of Electrical and Computer Engineering, Department of Computer Science, the Center for Applied Brain and Cognitive Sciences (CABCS) at Tufts University and the U.S. Army Combat Capabilities Development Command Soldier Center at Natick., MA This appointment would be for 12-18 months with an estimated start date of October 2019.

The primary project is entitled "Real time prediction of individual and team performance metric from neurophysiological measurements and team interaction data". Under this project, the fellow will work with Tufts faculty, Drs. Shuchin Aeron, Michael Hughes, and Eric Miller, as well as CABCS scientists to develop supervised and semi-supervised machine learning algorithms that are capable of predicting cognitive state (e.g. stress) and task performance metrics (e.g. speed or marksmanship) from labeled and unlabeled multimodal physiological sensor data including information collected continuously as a function of time (e.g. accelerometer recordings or GPS trajectories) as well as data at a relatively few points in time before, during, and after a specific task (e.g. surveys and performance evaluations). In addition to assessing individuals, data will be collected to support the characterization of team and intergroup dynamics. We anticipate

the effort will require the use of classical as well as recent developments in machine learning and in particular recurrent neural networks, deep generative models, manifold learning, and social network analysis.

While previous experience in theoretical and applied machine learning would be ideal, we welcome applicants with significant experience in related fields including information theory, statistical signal processing, sparse signal or image processing, compressive sensing, and distributed convex optimization.

Interested applicants should send a cover letter detailing their research interests and career goals, CV, and names and contact information of 3 references to Dr. Shuchin Aeron (shuchin at ece.tufts.edu).

Useful Links:

- * Prof. Shuchin Aeron: <http://www.ece.tufts.edu/~shuchin/>
- * Prof. Michael C. Hughes: <https://www.michaelchughes.com/>
- * Prof. Eric Miller: <http://www.ece.tufts.edu/~elmiller/elhome/>
- * Tufts Center for Applied Brain and Cognitive Sciences: <https://engineering.tufts.edu/departments/cabcs>

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From: Youzuo Lin ylin@lanl.gov (via NADIGEST)
Subject: Postdoc Position, Deep Learning for Computational Imaging, LANL
Date: July 30, 2019

We have an immediate opening for a creative and resourceful postdoctoral researcher with strong computational skills and experience in imaging inverse problems and deep learning methods. We are seeking a highly-motivated individual to join a multidisciplinary research team consisting of machine learning scientists, computational scientists and domain experts to conduct cutting-edge machine learning research for computational imaging, with application to the subsurface, material and other scientific domains.

Minimum Job Requirements:

- Strong computational science and numerical optimization skills, in particular, computational imaging and inverse problems
- Strong deep learning skills and practical experience in various neural network architectures (DNN, CNN, RNN/LSTM, GAN or other auto encoder)
- Practical experience with machine learning packages such as PyTorch, TensorFlow, Keras, etc.

- Code development and computational experience in using high-performance parallel computing resources
- Solid publication record in high-impact journals, top-tier machine learning, and related conferences
- Excellent communication, writing, and oral presentation skills, and
- Strong programming skills, in Python in particular.

Desired Skills:

- Demonstrated ability to work creatively and independently and in a team environment.
- Ability to obtain DOE Q clearance.

Education: A Ph.D. in Computer Sciences, Applied Math, Computational Sciences, Electrical Engineering or closely related field is required. The candidate must have completed all Ph.D. requirements by commencement of the appointment and be within 5 years of completion of the Ph.D.

To apply, please search for IRC75107 under jobs.lanl.gov

Additional information about this position can be obtained by contacting Dr. Youzuo Lin (ylin@lanl.gov) and Dr. Brendt Wohlberg (brendt@lanl.gov).

 From: "noreply@degruyter.com" <noreply@degruyter.com>
 Subject: Contents, 'Journal of Inverse and Ill-posed Problems'
 Date: Thursday, August 1, 2019

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<https://www.degruyter.com/view/j/jiip.2019.27.issue-4/issue-files/jiip.2019.27.issue-4.xml>

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