Subject: [NADIGEST] NA Digest, V. 21, # 5
From: NA Digest Editor <nadigesteditor@GMAIL.COM>
Date: 2021-02-08, 4:13 p.m.
To: <NADIGEST@LISTSERV.UTK.EDU>

Attention : courriel externe | external email

Subject: NA Digest, V. 21, # 5

NA Digest Monday, February 08, 2021 Volume 21 : Issue 5

Today's Editor:

Daniel M. Dunlavy
Sandia National Labs
dmdunla@sandia.gov

Today's Topics:

Subscribe, unsubscribe, change address, or for na-digest archives:
http://www.netlib.org/na-digest-html/faq.html

Submissions for NA Digest:
http://icl.utk.edu/na-digest/

From: John C Nash nashjc@uottawa.ca
Date: February 03, 2021
Subject: Nashlib update and consolidation

An exchange of emails between Peter Olsen and John Nash has led to a
modest project to bring together various implementations of the
pseudo-code algorithms from Nash J. C. "Compact Numerical Methods for
Computers: Linear Algebra and Function Minimisation", Adam Hilger:

Bristol, 1979. There was a 1990 Second Edition with Turbo Pascal codes which are part of the netlib collection.

The codes have turned out to be surprisingly resilient and have evolved as they have been applied, in particular in the R project. Codes and documentation are being collected and edited so they all are runable at https://github.com/pcolsen/Nash-Compact-Numerical-Methods

We believe the collection may prove useful:
- as a repository of different versions of the codes, possibly with addition of the extensions that have appeared over the nearly half century since some were initially coded.
- as a source of modest student or learning projects to code the algorithms in different programming languages e.g., Matlab/Octave or C. Python and R are the current goals. Fortran, BASIC and Pascal are well- represented.
- as a resource for exploring the influence of resource and programming language features on software design.
- as a base for specialised implementations e.g., a multiprecision version of an SVD code has been built, where the short code was helpful to adapting to the programming language extensions.

We welcome interest and collaboration.

John Nash and Peter Olsen

From: Fabio Nobile fabio.nobile@epfl.ch
Date: February 02, 2021
Subject: CEMRACS, Data Assimilation and Reduced Modeling, Jul-Aug 2021

CEMRACS is a summer program aiming at bringing together scientists from both the academic and industrial communities to work on and discuss focused topics. The program includes a one-week summer school followed by 5 weeks of research sessions on projects proposed by academic and industrial partners. The next CEMRACS 2021 will be on "Data Assimilation and Reduced Modeling for High Dimensional Problems" and will be held at CIRM (Luminy, France), Jul 19 - Aug 27, 2021.

Confirmed speakers of the summer school (Jul 19-23) are: Albert Cohen (Sorbonne University); Masoumeh Dashti (University of Sussex); Eric Moulines (Ecole Polytechnique); Anthony Nouy (Ecole Centrale de Nantes); Claudia Schillings (Mannheim University)

More information at http://smai.emath.fr/cemracs/cemracs21

Participants may register to the summer school only or to the entire program. Junior participants may apply for fellowships to cover part or the whole stay. Registration and application for fellowships will be open soon. People interested in submitting a research project should contact the organizers at cemracs21@smai.emath.fr We also encourage the students and young researchers interested in participating to contact the organizers.

From: Luca Paglieri luca.paglieri@polimi.it
Date: February 08, 2021
Subject: Modelling the Cardiac Function, ONLINE, Jul 2021

2021 iHEART Online Congress
Modelling the Cardiac Function
July 1-3, 2021
https://iheart.polimi.it/mcf2021

This congress aims at highlighting the state of the art in the mathematical modelling and numerical simulation of the cardiac function and its clinical applications. The event will take place online and it will host plenary lectures from distinguished scientists as well as contributed talks.

Plenary speakers: Antonio Frontera (Ospedale San Raffaele, IT); Boyce Griffith (University of North Carolina, USA); Julius M. Guccione (University of California San Francisco, CA USA); Gianluca Pontone (Centro Cardiologico Monzino, IT); Kenji Takizawa (Waseda University, Tokyo JP); Natalia Trayanova (Johns Hopkins University, MD USA); Alessandro Veneziani (Emory University, Atlanta GA USA)

This is the fifth Conference of the series MPF - Modelling the Physiological Flows and is organized by MOX - Politecnico di Milano, with the support of the EU ERC - ADG - Advanced Grant iHEART - Project ID: 740132

Contributed talks (15 min) are welcome. Deadline for Abstract submission is April 30, 2021. For more information, abstract submission and registration, visit https://iheart.polimi.it/mcf2021

From: Lars Gruene lars.gruene@uni-bayreuth.de
Date: February 01, 2021
Subject: Mathematical Theory of Networks and Systems, Germany, Sep 2022

The 25th International Symposium on Mathematical Theory of Networks and Systems (MTNS 2022) will be held on 12-16 September 2022 in Bayreuth, Germany.

MTNS is a major symposium in the general area of mathematical systems theory, networks and control. The symposium is interdisciplinary and attracts mathematicians, engineers and researchers working in all aspects of systems and control theory and its applications. The symposium is held every two years. Mathematical methods which play a role in the areas mentioned above stem from a broad range of fields of pure and applied mathematics, including ordinary and partial differential equations, real and complex analysis, numerical analysis, optimization, probability theory and stochastic analysis, operator theory, linear and commutative algebra as well as algebraic and differential geometry. Application areas range from biology,

communications and mathematical finance to problems in electrical, mechanical, aerospace and chemical engineering, and robotics.

We are looking forward to a stimulating symposium with exciting talks and discussions. For more information see https://www.mtns2022.uni-bayreuth.de

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From: Michiel Hochstenbach M.E.Hochstenbach@tue.nl
Date: February 03, 2021
Subject: Full Professor Position, TU Eindhoven

We have a position for a Full Professor Data-Driven Computational Science; please see:

https://jobs.tue.nl/en/vacancy/full-professor-datadriven-computational-science-871057.html

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From: Daniel Appelö appeloda@msu.edu
Date: January 29, 2021
Subject: Assistant Professor Positions, CMSE, MSU

We are delighted to let you know that the Dept. of Computational Mathematics, Science and Engineering (CMSE; https://cmse.msu.edu) at Michigan State University is inviting applications for multiple Fixed-term Assistant Professor positions with a starting date of Fall 2021.

We are interested in exceptional candidates with experience in computational or data science who can teach flagship courses in these areas. Successful candidates will receive training in research-based teaching pedagogy, will have the opportunity to perform research in collaboration with CMSE faculty members, and will be able to participate in a range of additional professional development opportunities. Applications received by February 22, 2021 will receive full consideration.

The official advertisement for this search is found at https://careers.msu.edu/en-us/job/504724/assistant-professorfixedterm and contains additional details.

Please direct all questions to Arjun Krishnan (arjun@msu.edu; Search committee chair).

From: Dietmar Gallistl dietmar.gallistl@uni-jena.de
Date: February 04, 2021
Subject: Junior Professorship Position, NA, Univ of Jena

The Faculty of Mathematics and Computer Science at the University of Jena invites applications for the position of a Junior Professorship

(W1, fixed-term) in Numerical Analysis, which is available from 1st October 2021.

The application deadline is 4th March 2021. More details about the position and the application process can be found at https://numerik.uni-jena.de/w1-opening

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From: Josef Dick josef.dick@unsw.edu.au
Date: February 03, 2021
Subject: Senior Lecturer Position, Applied Mathematics, UNSW Sydney

Actively carry out research in an area of applied mathematics that aligns with the research strengths in the School, with a view to publication in influential and high-impact scholarly journals. Mathematicians working at the interface of applied mathematics and data science are particularly encouraged to apply.

https://external-careers.jobs.unsw.edu.au/cw/en/job/500203/lecturersenior-lecturer-applied-mathematics

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From: Jake Olivier j.olivier@unsw.edu.au
Date: February 03, 2021
Subject: Senior Lecturer Position, Data Science, UNSW Sydney

The Senior Lecturer in Data Science will; (i) conduct research in this specialized field and align, where possible, with the existing research strengths in the School; (ii) contribute actively to the School's teaching activities in Data Science and Statistics across a range of undergraduate and postgraduate courses, including online teaching; (iii) engage with the community and industry to build links in Data Science

https://external-careers.jobs.unsw.edu.au/cw/en/job/500212/senior-lecturer-data-science

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From: Josef DIck josef.dick@unsw.edu.au
Date: February 03, 2021
Subject: Lecturer Position, Applied Mathematics, UNSW Sydney

Actively carry out research in an area of applied mathematics that aligns with the research strengths in the School, with a view to publication in influential and high-impact scholarly journals. Mathematicians working in mathematical modelling are particularly encouraged to apply.

https://external-careers.jobs.unsw.edu.au/cw/en/job/500834/lecturer-applied-mathematics

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From: Jake Olivier j.olivier@unsw.edu.au
Date: February 03, 2021
Subject: Lecturer Position, Data Science, UNSW Sydney

The Lecturer in Data Science will; (i) conduct research in this specialized field and align, where possible, with the existing research strengths in the School; (ii) contribute actively to the School's teaching activities in Data Science and Statistics across a range of undergraduate and postgraduate courses, including online teaching; (iii) engage with the community and industry to build links in DThe Lecturer in Data Science will; (i) conduct research in this
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https://external-careers.jobs.unsw.edu.au/cw/en/job/500211/lecturer-data-scienceata
Science.

https://external-careers.jobs.unsw.edu.au/cw/en/job/500211/lecturer-data-
science

From: Daniel Chan danielc@unsw.edu.au
Date: February 03, 2021
Subject: Lecturer Position, Pure Mathematics, UNSW Sydney

The School of Mathematics and Statistics currently has more than sixty continuing academic staff and more than thirty research staff as well as visiting academics. UNSW is the only university in Australia to be ranked in the top 100 in the world in Mathematics and Statistics by each of the four ranking bodies: CWTS Leiden, ARWU, USNews, QS. The School embodies a broad range of research interests in the areas of applied and pure mathematics and statistics. In Pure Mathematics, the School has particular research strengths in Algebra, Analysis, Combinatorics, Geometry, Mathematical Physics and Number Theory. More broadly, the School also has research strengths in Bayesian and Monte Carlo Methods, Mathematical Modelling and Biomathematics, Biostatistics and Ecology, Computational Mathematics, Data Science, Dynamical Systems and Integrability, Data Science, Finance and Risk Analysis, Nonparametric Statistics, Ocean and Atmospheric Sciences, Optimisation, Stochastic Analysis, Stochastic Modelling and Fractional Calculus.

https://external-careers.jobs.unsw.edu.au/cw/en/job/500835/lecturer-pure-mathematics

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From: Leo Liberti leoliberti@gmail.com
Date: February 04, 2021
Subject: Multiple Positions, Computer Science, Ecole Polytechnique, France

Ecole polytechnique, leading engineering school in France, member of IP Paris, welcomes applications for several academic positions, jobs starting in september 2021:

- 1 Assistant Professor in Computer Science, specialty "Bioinformatics or Machine learning", full-time position
- 1 Professor in Computer Science, specialty "Cybersecurity, Distributed Algorithms or Computer Networking", full-time position
- 1 Professor in Computer Science, full-time position
- 1 part-time Assistant Professor in Computer Science, part-time teaching position
- 1 part-time Assistant Professor in Computer Science specialty "Big Data, Computer Graphics, C++", part-time teaching position
- 1 part-time Professor "Charge de cours" in Computer Science, part-time teaching position
- 1 part-time Professor "Charge de cours" in Computer Science specialty "Computer Networking", part-time teaching position

Full-time position holders are expected to join LIX, the joint CS lab of Ecole Polytechnique and CNRS (https://www.lix.polytechnique.fr). Part-time position holders combine their teaching activity at Ecole Polytechnique with a main job (in France) carried out in the academic or industrial sector. Precise informations (and in particular contacts) regarding each of these job offers are available following the link:
https://portail.polytechnique.edu/informatique/en/faculty-positions-computer-science?q=fr/recrutement

Applications are open until March 15, 2021.

From: Gerlind Plonka-Hoch plonka@math.uni-goettingen.de
Date: February 04, 2021
Subject: Postdoc Position, Applied Mathematics, Univ of Goettingen

The Research Training Group 2088 "Discovering Structure in Complex Data: Statistics Meets Optimization and Inverse Problems" (Speaker: Prof. Dr. Gerlind Plonka-Hoch) at the University of Gottingen offers a Postdoc Position (all genders welcome) in Applied Mathematics starting as soon as possible for a period of three years. The salary is in accordance with the German public service salary scale (E13 TV-L) with 100% of the regular working hours (currently 39.8 hours per week).

We are looking for a postdoc who has strong expertise related to at least one of these fields: inverse problems, optimization, mathematical statistics, data analysis, computational harmonic analysis or mathematical signal and image processing. The candidate shows considerable breadth in their previous research and a willingness to explore new topics.

Your profile: an excellent Master's degree or equivalent qualification, followed by a doctorate in mathematics with a strong

publication record; a strong background in one of the mathematical disciplines covered by the RTG; very good English skills (written and spoken); willingness to work in an interdisciplinary team; good programming skills are beneficial.

Deadline is February 12, 2021. The position will be filled as soon as possible. More information is available at https://www.uni-goettingen.de/de/305402.html?cid=100802

From: Kathrin Welker welker@hsu-hh.de
Date: February 01, 2021
Subject: PhD Position, Optimization, Helmut-Schmidt-Univ Hamburg, Germany

The Helmut-Schmidt-University / University of the Federal Armed Forces in Hamburg (Germany) offers a position as a Research Assistant (f/m/d) to be filled by a PhD student. The position is initially limited until December 31, 2024.

The successful candidate will be working in the interdisciplinary research project "Structural Health Monitoring" (principal investigator: Prof. Dr. Kathrin Welker, Helmut-Schmidt-University). The project is carried out in collaboration with research partners from the Faculty of Mechanical Engineering and the Faculty of Economics and Social Sciences of the Helmut-Schmidt-University.

We offer the possibility to participate in special programs to promote young scientists, funding to participate in conferences and summer schools, new personalized IT setup and access to university laboratories including powerful computing clusters.
Requirements for employment are a masters degree in mathematics, programming skills and a strong background in optimization or numerical mathematics.

For the job announcement, please see
https://www.hsu-hh.de/karriere/wp-content/uploads/sites/658/2021/01/Kennziffer-MB-5620.pdf

or visit

https://www.academics.de/jobs/wissenschaftlicher-mitarbeiter-m-w-d-in-der-juniorprofessur-fuer-mathematik-im-bauingenieurwesen-helmut-schmidt-universitaet-universitaet-de\
r-bundeswehr-hamburg-hamburg-1035679

The job announcement is written in german but english applications are very welcome. Should any questions appear, please contact Prof. Dr. Kathrin Welker (welker@hsu-hh.de). Applications (including at least a cover letter, CV and certificates of academic degrees) should be directed by e-mail to personaldezernat@hsu-hh.de by mentioning the reference number MB- 5620 by February 25, 2021.

From: Michele Benzi michele.benzi@sns.it
Date: February 02, 2021
Subject: PhD Positions, Scuola Normale Superiore, Pisa, Italy

Seven PhD Fellowships are available for students interested in pursuing a PhD degree in Computational Methods and Mathematical Modeling for the Sciences and Finance. Areas of specialization include Numerical Analysis and Scientific Computing, Stochastic Analysis, Computational Physics/Chemistry/Biology, and Quantitative Finance.

The application deadline is March 1. For instructions on how to apply, please see
https://www.sns.it/en/admissions/phd/how-to-apply-for-the-post-graduate-course

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From: Adhemar Bultheel adhemar.bultheel@cs.kuleuven.be
Date: January 30, 2021
Subject: CFP, J Comput Appl Math Honoring Luc Wuytack

The Journal of Computational and Applied Mathematics is announcing a special issue in honor of Luc Wuytack who passed away on November 6th 2020. He was one of the founding editors of JCAM and held the role of co-editor-in-chief until the end of 2018.

Subjects include but are not limited to computational aspects of approximation theory, classical and modern approximation methods ranging from rational and Padé approximants to splines, methods of numerical integration, iterative processes for solving nonlinear equations and any other numerical approximation techniques for solving various types of mathematical and applied problems.

This issue will contain only papers that meet the publication standards of the journal, and that are approved by normal refereeing procedures

More details can be found at
https://www.journals.elsevier.com/journal-of-computational-and-applied-mathematics/call-for-papers/special-issue-on-in-memoriam-luc-wuytack

Guest editors are Lucia Romani (University of Bologna), Adhemar Bultheel (KU Leuven), and Miodrag Petkovic (University of Niš)

Important Dates:
Submission opening: March 8th, 2021
Submission deadline: July 9th, 2021

From: Thomas Humphries thumphri@uw.edu
Date: February 03, 2021
Subject: CFP, JANO Special Issue on Projection and Splitting Methods

We (Aviv Gibali, Pontus Giselsson and Thomas Humphries) are serving as guest editors of a special issue of the new Journal of Applied and Numerical Optimization (http://jano.biemdas.com/) focused on

Projection and splitting methods and their applications

This special issue aims at bringing together articles on recent advances in projection and splitting methods. The topic should appeal to researchers working in the field of mathematical optimization, for example, variational inequalities, fixed point theory, feasibility problems, parameter estimation, and learning.

In case you plan to contribute, we would appreciate receiving a tentative title from you no later than April 1, 2021. The deadline for submitting the manuscript is September 1, 2021. All your communications regarding your submission to the special issue should be addressed to thumphri@uw.edu, with copies to Editor-in-Chief Akhtar A. Khan at aaksma@rit.edu and the Editorial Office of the journal at jano@biemdas.com. Final publication decisions on (possibly revised versions of) all submitted articles will be made by April 1, 2022.

Hoping that you will join us on this project, with best regards on behalf of Aviv Gibali (ORT Braude College, Karmiel, Israel), Pontus Giselsson (Lund University, Sweden) and Thomas Humphries (University of Washington Bothell, USA)

From: Fikret Aliev chief_ed@acmij.az
Date: January 31, 2021
Subject: Contents, Applied and Computational Mathematics, 20 (1)

Applied and Computational Mathematics an International Journal
http://www.acmij.az
Special Issue on Fuzzy logic and its application to modeling epidemies: Coronavirus and beyond
Vol.20, No.1, February 2021

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Modeling the optimal interventions to curtail the cluster based COVID-19 pandemic in India: efficacy of prevention measures, Tanvi, Rajiv Aggarwal, Ashutosh Rajput

Forecasting of the Istanbul stock exchange (ISE) return with a golden ratio model in the epidemic of COVID-19, O. Oztunc Kaymak, Y. Kaymak, N. Ozdemir

Application of similarity measure in pattern recognition of COVID-19 spread and its effects in Pakistan, Muhammad Saeed, Asad Mehmood, Thabet Abdeljawad, Muhammad Haris Saeed, Muhammad Asim

An adaptive neuro fuzzy modelling and prediction system for diagnosis of COVID-19, Aditya Khamparia, Rajat Jain, Poonam Rani, Deepak Gupta, Ashish Khanna, Oscar Castillo

A stochastic mathematical model for COVID-19 according to different age groups, A. Babaei, H. Jafari, S. Banihashemi, M. Ahmadi

A fuzzy-based strategy to suppress the novel coronavirus (2019-nCoV) massive outbreak, Tie-Hong Zhao, Oscar Castillo, Hadi Jahanshahi, Abdullahi Yusuf, Madini O. Alassafi, Fawaz E. Alsaadi, Yu-Ming Chu

A fractional multi-order model to predict the COVID-19 outbreak in Morocco, Abdelouahed Alla Hamou, Elhoussine Azrou, Zakia Hammouch, Abdelilah Lamrani Alaoui

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End of Digest

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