



INTERNATIONAL

INVITED SESSION SUMMARY

Title of Session:

Business applications of Artificial Intelligence

Name, Title and Affiliation of Chair:

Dr Pawel Weichbroth, Gdansk University of Technology, Faculty of Electronics, Telecommunications and Informatics

Professor Michal Czubenko, Gdansk University of Technology, Faculty of Electronics, Telecommunications and Informatics

Details of Session (including aim and scope):**Scope**

Rapid advancements in artificial intelligence (AI) have transformed many industries, including marketing, finance, banking, healthcare, education, energy, and more. This special session aims to bring together researchers, practitioners, and industry experts to discuss the latest developments in artificial intelligence systems and tools driving these transformations. The session will cover state-of-the-art methods and emerging trends in using AI to solve complex, real-world problems.

The following topics related to Artificial Intelligence (AI), covering applications, methods, and tools suitable for research papers, but not limited to, could cover:

- AI in Healthcare: Applications of AI in medical diagnosis, personalized medicine, and drug discovery.
- Autonomous Vehicles: AI-driven innovations in self-driving cars and transportation systems.
- AI in Finance: Risk assessment, fraud detection, and algorithmic trading using AI.
- AI for Climate Change: AI tools for environmental monitoring and climate modeling.
- Natural Language Processing (NLP): AI in sentiment analysis, translation, and conversational agents.
- AI in Education: Adaptive learning systems and personalized educational experiences.
- AI for Social Good: AI applications in disaster response and humanitarian aid.
- AI in Art and Creativity: Generative AI for music, visual art, and storytelling.
- AI in Cybersecurity: AI-powered threat detection and response systems.
- AI in Agriculture: Crop monitoring, yield prediction, and automated farming systems.
- Deep Learning Architectures: Advances in convolutional neural networks (CNNs) and transformers.
- Reinforcement Learning: Novel applications and techniques in reward-based learning systems.
- Explainable AI (XAI): Methods to enhance transparency and interpretability in AI models.
- Federated Learning: Privacy-preserving distributed learning techniques.
- Adversarial Machine Learning: Understanding and mitigating adversarial attacks on AI systems.
- Multi-Modal Learning: Integrating text, images, and other data types into unified models.
- Optimization Techniques: Improving AI model training through advanced optimization algorithms.
- Zero-Shot and Few-Shot Learning: Learning from minimal labeled data.
- Transfer Learning: Reusing pretrained models across diverse applications.
- Causal Inference in AI: Incorporating causal relationships into machine learning models.
- AI for Big Data Analytics: Scalable AI techniques for processing large datasets.
- Open-Source AI Frameworks: Advances in tools like TensorFlow, PyTorch, and JAX.
- AI Model Deployment: Challenges and solutions for deploying models at scale.
- AI Benchmarking Tools: Frameworks for evaluating AI performance across tasks.
- Data Augmentation Techniques: Tools for improving training datasets in machine learning.

Main Contributing Researchers / Research Centres (tentative, if known at this stage):

Adamek adamek@utb.cz
Adjorlu adj@create.aau.dk
Agost magost@uji.es
Almeida almeida@ua.pt
Andreoletti davide.andreoletti@supsi.ch
Antunes andre.antunes@estsetubal.ips.pt
Apicella andrea.apicella@unina.it
Arnseth h.c.arnseth@iped.uio.no
Arroyo-Ferrer aida.arroyo@ufv.es
Asprino luigi.asprino@unibo.it
Baka evangelia.baka@hug.ch
Balfour m.balfour@unsw.edu.au
Barde amit.barde@auckland.ac.nz
Barker simon.barker@vuw.ac.nz
Barszczm.barszcz@pollub.pl
Baytar baytar@cornell.edu
Beaglehole ben.beaglehole@otago.ac.nz
Benaouicha mustapha.benaouicha@segula.fr
Berns anke.berns@uca.es
Berrezueta-Guzman s.berrezueta@tum.de
Blanc juditeblanc@miami.edu
Bolos alexandra.bolos@umfiasi.ro
Bonfert bonfert@uni-bremen.de
Bonfiglio l.bonfiglio@ao-pisa.toscana.it
Boros martin.boros@uniza.sk
Bruni r.bruni@unicas.it
Bruni leb@create.aau.dk
Buchner josef.buchner@phsg.ch
Bujic mila.bujic@tuni.fi
Buruk oguz.buruk@tuni.fi
Calandra davide.calandra@polito.it
Camardella cristian.camardella@santannapisa.it
Camardella c.camardella@santannapisa.it
Carroll fcarroll@cardiffmet.ac.uk
Caruana nathan.caruana@mq.edu.au
Carvalho psc@ubi.pt
Chen chchen@asia.edu.tw
Chen q.chen@liacs.leidenuniv.nl
Chen victorchen@purdue.edu
Chen chen489@purdue.edu
Chen chenh@ntu.edu.sg
Cheng yun.cheng@sdsc.ethz.ch
Cheng chengks@eduhk.hk
Chi hung-lin.chi@polyu.edu.hk
Chidambaram schidamb@purdue.edu
Choi wcjchoi@yonsei.ac.kr
Choi min.choi@ucdenver.edu
Choi chj@hanyang.ac.kr
Chu thi.my.chinh.chu@bth.se
Chuangjhchuang@cs.nctu.edu.tw
Chuangjhchuang@cs.nycu.edu.tw
Conesa julian.conesa@upct.es
Coppin gilles.coppin@imt-atlantique.fr
Cutting d.cutting@qub.ac.uk
Dascalu cristina.dascalu@umfiasi.ro
De Cock laudcock.decock@ugent.be
de Oliveira victor.oliveira@fhstp.ac.at

De Sena e.desena@surrey.ac.uk
 de Siqueira agomesdesiqueira@ufl.edu
 Dearlove david.dearlove@ocdem.ox.ac.uk
 Dechant m.dechant@ucl.ac.uk
 Dechsling anders.dechsling@hiof.no
 Di Tore sditore@unisa.it
 Ding ading@uga.edu
 Docter m.w.docter@tudelft.nl
 Doh yydoh@kaist.ac.kr
 Doz daniel.do@pef.upr.si
 Driscoll mark.driscoll@mcgill.ca
 Eder matthias.eder@ist.tugraz.at
 Eglistonbenjamin.egliston@sydney.edu.au
 Ellithorpe mellitho@udel.edu
 Fang fangeo@nuu.edu.tw
 Fejdyš mfejdyš@moratex.eu
 Fernández-Capo mariafc@uic.es
 Föcker jfoecker@lincoln.ac.uk
 Frankiewicz mfrankiewicz@gumed.edu.pl
 Gaugneronan.gaugne@irisa.fr
 George ceenu.george@ifi.lmu.de
 Gharineiat zahra.gharineiat@unisq.edu.au
 Gibaldi agostino.gibaldi@unige.it
 Ginda gginda@zarz.agh.edu.pl
 Godulla alexander.godulla@uni-leipzig.de
 Grace kazjon.grace@sydney.edu.au
 Guimond synthia.guimond@uqo.ca
 Han hjk@sejong.edu
 Hasegawa t-hase@u-fukui.ac.jp
 Hassan waseem.h@khu.ac.kr
 Holländer kai.hollaender@ifi.lmu.de
 Hong hyunki.hong@seoultech.ac.kr
 Hsieh yzhsieh@mail.ntou.edu.tw
 Hu anita_hu@mail.ncku.edu.tw
 Huang ofihuang@tmu.edu.tw
 Huang lhhuang@ntu.edu.sg
 Hunsu nathaniel.hunsu@uga.edu
 Iconomescu ticonomescu@ugal.ro
 Illsley-Kemp finnigan.illsleykemp@vuw.ac.nz
 Impellizzeri federica.impellizzeri@irccsme.it
 Iordan daniel.iordan@ugal.ro
 Jaeger jaegerba@stjohns.edu
 Jaeggi david.jaeggi@swisstopo.ch
 Jaiswal ashish.jaiswal@mavs.uta.edu
 Jeong jwjeong55@jbnu.ac.kr
 Jiang wenchao_jiang@sutd.edu.sg
 Jildenstål pether.jildenstal@gu.se
 Jochems nicole.jochems@uni-luebeck.de
 Jung jungsh@anu.ac.kr
 Jufík jurik.vojtech@mail.muni.cz
 Kalavria ekalavria@culture.gr
 Kang siamiz@khu.ac.kr
 Karlsen anniken.t.karlsen@ntnu.no
 Khoo chin.khoo@deakin.edu.au
 Ki chloe.ki@polyu.edu.hk
 Kilgour andrew.kilgour2@rmit.edu.au
 Kim kji122@wku.ac.kr
 Kim sh.kim@deu.ac.kr
 Kim jinwook.kim31@kaist.ac.kr
 Kim yoonsang@koreatech.ac.kr

Kim syk@kangwon.ac.kr
 Kim hk.kim@cnu.ac.kr
 Kim cwkim@gachon.ac.kr
 Kim xml1324@kaist.ac.kr
 Kim jkim227@ua.edu
 Kim touch@pusan.ac.kr
 Kim snkim@cau.ac.kr
 Klotzbier thomas.klotzbier@inspo.uni-stuttgart.de
 Koedijk m.koedijk@vu.nl
 Kong anthony-pui-keung.kong@polyu.edu.hk
 Kosti mkosti@iti.gr
 Kotwal ketan.kotwal@idiap.ch
 Koumaditis kkoumaditis@btech.au.dk
 Kroupi eleni.kroupi@starlab.es
 Kuling i.a.kuling@tue.nl
 Ładyżyńska-Kozdraś edyta.ladyzynska@pw.edu.pl
 Lapointe jean-francois.lapointe@nrc-cnrc.gc.ca
 Laska-Leśniewicz anna.laska@p.lodz.pl
 Lee whlee@handong.edu
 Lee ericlee@ntut.edu.tw
 Lee jeongmi@kaist.ac.kr
 Lee jeannie.lee@singaporetech.edu.sg
 Lee mignon@yonsei.ac.kr
 Lee txlee@mail.ntust.edu.tw
 Leo-Liu jindongliu@link.cuhk.edu.hk
 Li gang.li@glasgow.ac.uk
 Li xinming.li@ualberta.ca
 Li hcli01@mail.cgust.edu.tw
 Lin yingyan.lin@rice.edu
 Lin bdgal@nus.edu.sg
 Lindsay r.lindsay@federation.edu.au
 Linkov vaclav.linkov@cdv.cz
 Lipson-Smith ruby.lipson-smith@florey.edu.au
 Lisiński plisinski@ump.edu.pl
 Liu sunnyxliu@stanford.edu
 Lougiakis chrislou@di.uoa.gr
 Lu shuanglu@hku.hk
 Lyu minzhao.lyu@unsw.edu.au
 Ma shugaoma@bu.edu
 Maathuis clara.maathuis@ou.nl
 Machulla tonja.machulla@ifi.lmu.de
 Male sally.male@unimelb.edu.au
 Malpica smalpica@unizar.es
 Manolova amanolova@tu-sofia.bg
 Maravich maria.maravich@tu-dresden.de
 Martinsen randi.martinsen@inn.no
 Massler massler@ph-weingarten.de
 Matos joao.matos@ulusofona.pt
 Matsuzaki yutaka.matsuzaki.e5@tohoku.ac.jp
 Matthews m.matthews@ulster.ac.uk
 Matulin mmatulin@fpz.unizg.hr
 Mazur jmazur@uky.edu
 McGill mark.mcgill@glasgow.ac.uk
 Meruvia-Pastor oscar@mun.ca
 Miao y.miao@utwente.nl
 Mocanu bogdan_costel.mocanu@upb.ro
 Moisescu mihnea.moisescu@upb.ro
 Molnár molnar.erno@science.unideb.hu
 Monsur mmonsur@ttu.edu
 Monteiro diego.vilelamonteiro@esiea.fr

Moore agm@knights.ucf.edu
Morar anca.morar@cs.pub.ro
Moricca claudia.moricca@uniroma1.it
Morosi federico.morosi@polimi.it
Moussiades lmous@cs.duth.gr
Nagai nagai.t.aa@m.titech.ac.jp
Nalepka patrick.nalepka@mq.edu.au
Nam sanghunnam@changwon.ac.kr
Negru catalin.negru@upb.ro
Neshov nneshov@tu-sofia.bg
Newbutt nigel.newbutt@coe.ufl.edu
Nitsch v.nitsch@iaw.rwth-aachen.de
Oberdörfer sebastian.oberdoerfer@uni-wuerzburg.de
O'DWyer odwyerne@tcd.ie
Ody piodya@pg.edu.pl
Ogrizović dario@pfri.uniri.hr
Onu ilie.onu@umfiasi.ro
Orbán-Mihálykó orbane@almos.uni-pannon.hu
Oskam j.oskam@hotelschool.nl
Pan typan@mail.ntust.edu.tw
Pande ppande@smu.edu
Park h.park@yonsei.ac.kr
Park iypark@swu.ac.kr
Park spark@sejong.ac.kr
Parke aparke@lincoln.ac.uk
Parmar d.parmar@northeastern.edu
Pastel stefan.pastel@ovgu.de
Paszkievicz andrzejp@prz.edu.pl
Pedram shiva.pedram@newcastle.edu.au
Peña-Castillo lourdes@mun.ca
Peng huaishu@cs.umd.edu
Pérez-Llanes rperez@ucam.edu
Pescarin sofia.pescarin@cnr.it
Pesek matevz.pesek@fri.uni-lj.si
Paternier achille.paternier@supsi.ch
Pitura joanna.pitura@uken.krakow.pl
Pöhlmann kpohlmann@lincoln.ac.uk
Porrás-García bporras@uic.es
Pouloupoulos vacilos@uop.gr
Prati elisa.prati@unimore.it
Qu k2qu@uwaterloo.ca
Queiroz f.queiroz@leeds.ac.uk
Quinn barry.quinn@liverpool.ac.uk
Radianti jaziar.radianti@uia.no
Raimbaud pierre.raimbaud@ec-lyon.fr
Ramirez ejramirez@scu.edu
Rechowicz krechowi@odu.edu
Rego paularego@estg.ipv.pt
Regulski piotr.regulski@wum.edu.pl
Reynolds reed.reynolds@umb.edu
Rifai katharina.rifai@medizin.uni-tuebingen.de
Roascio stefano.roascio@cultura.gov.it
Roch jonathan.roch@med.uni-goettingen.de
Rodríguez jlrodri@ual.es
Rojas-Muñoz ed.rojas@exchange.tamu.edu
Ruozzi nicholas.ruozzi@utdallas.edu
Saint-Aubert justine.saint-aubert@inria.fr
Sakaki kohei.sakaki@tohoku.ac.jp
Salach m.salach@prz.edu.pl
Salamanca ssalamanca@unex.es

Sanfilippo	filippo.sanfilippo@uia.no
Saryazdi	rahelehsaryazdi@trentu.ca
Sauvage	e.sauvage@ucl.ac.uk
Schmidt	schmidt@informatik.uni-hamburg.de
Schmidt	a.schmidt@hotelschool.nl
Schonstein	claudiu.schonstein@mep.utcluj.ro
Schwandt	tobias.schwandt@tu-ilmenau.de
Sehnalek	sehnalek@utb.cz
Shafiq	m.tariq@hw.ac.uk
Shannon	michelle.shannon@monash.edu
Shin	waver0920@wku.ac.kr
Shultz	jonas.shultz@hqca.ca
Sibilska-Mroziewicz	anna.mroziewicz@pw.edu.pl
Siette	joyce.siette@westernsydney.edu.au
Sikorski	tomasz.sikorski@phd.ujk.edu.pl
Silva	jsilva@estgv.ipv.pt
Skorin-Kapov	lea.skorin-kapov@fer.hr
So	bryan.so@connect.polyu.hk
Soccini	agatamarta.soccini@unito.it
Solberg	mads.solberg@ntnu.no
Sousa	mauricio.sousa@utoronto.ca
Spantidi	ourania.spantidi@emich.edu
Stavroulia	k.stavroulia@cyens.org.cy
Steier	rolf.steier@oslomet.no
Stephens	m.stephens@unimelb.edu.au
Sugaya	doly@shibaura-it.ac.jp
Surugiu	camelia.surugiu@faa.unibuc.ro
Surugiu	marius.surugiu@ien.ro
Sventekova	eva.sventekova@uniza.sk
Tabirca	tabirca@cs.ucc.ie
Talaghir	gtalaghir@ugal.ro
Templintomasz	templin@uwm.edu.pl
Till	r.till@hud.ac.uk
Tokede	olubukola.tokede@deakin.edu.au
Toma	stefan.toma@mta.ro
Triantafillou	vtrianfaf@uop.gr
Trigueiro	mjtrigueiro@ess.ipp.pt
Tsanousa	atsan@iti.gr
Ulloa	christyan.cruz.ulloa@upm.es
Uranishi	uranishi@ime.cmc.osaka-u.ac.jp
Vairinhos	mariov@ua.pt
van Keulen	j.vankeulen@tudelft.nl
Van Seghbroeck	gregory.vanseghbroeck@ugent.be
Vincent	stacy.vincent@uky.edu
Vizentingoran	vizentin@pfri.uniri.hr
von Castell	castell@uni-mainz.de
Waller	ed.waller@uoit.ca
Walter	steffen.walter@uni-ulm.de
Wang	wkc@gm.cyut.edu.tw
Wang	wangcm@yuntech.edu.tw
Wang	jywang8919@ntu.edu.tw
Weerasinghe	maheshya.weerasinghe@famnit.upr.si
Wehbe	rina.wehbe@dal.ca
Weidner	f.weidner@lancaster.ac.uk
Weller	weller@cs.uni-bremen.de
Wessels	mwessels@uni-mainz.de
Willomitzer	fwillomitzer@arizona.edu
Won	a.s.won@cornell.edu
Wong	cswingo@cs.nctu.edu.tw
Xu	zheng.xu3@monash.edu

Yang zhiyyang@knights.ucf.edu
Yokoyama yokoyama@sda.nagoya-cu.ac.jp
Zadeh mohammad.zakizadehgharie@mavs.uta.edu
Zargham zargham@uni-bremen.de
Ziefle gesa.ziefle@bgr.de
Zimmermann dominique.zimmermann@nhm-wien.ac.at
Zollhöfer zollhoefer@cs.stanford.edu
Zwoliński grzegorz.zwolinski@p.lodz.pl

Website URL of Call for Papers (if any):

Email & Contact Details:

Paweł Weichbroth <pawel.weichbroth@pg.edu.pl>
Michał Czubenko <michal.czubenko@pg.edu.pl>