

Irene-Angelica Chounta

PROFESSOR IN COMPUTER SCIENCE · COMPUTATIONAL METHODS IN MODELING AND ANALYSIS OF LEARNING PROCESSES

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Education

University of Patras

PHD IN ENGINEERING (HUMAN-COMPUTER INTERACTION)

• Advisor: Dr. Nikolaos Avouris

Patras, Greece

July, 2014

University of Patras

DIPLOMA IN ELECTRICAL AND COMPUTER ENGINEERING (MSC EQUIVALENT)

Patras, Greece

2005

ATEI Piraeus

BS UNDERGRADUATE DEGREE IN COMPUTER SYSTEMS ENGINEERING

Piraeus, Greece

2000

Professional Experience

2023-
present

Full Professor (W2), University of Duisburg-Essen, Germany

2021-2023

Junior Professor (Tenure-Track), University of Duisburg-Essen, Germany

2018-2021

Assistant Professor, University of Tartu, Estonia

2016-2018

Postdoctoral Researcher, HCII, Carnegie Mellon University, USA (Supervisor: Bruce M. McLaren)

2014-2016

Postdoctoral Researcher, University of Duisburg-Essen, Germany (Supervisor: Ulrich H. Hoppe)

2009-2014

PhD Student/Researcher, University of Patras, Greece

2005-2009

Junior Researcher, University of Patras, Greece

Grants, Awards, Fellowships

2022	Augmented Intelligence for Pedagogically Sustained Training and Education (augMENTOR) , Integration of emerging new technologies into education and training, HORIZON-RIA HORIZON Research and Innovation Actions	€2 984 312, 50
	Digital Readiness in European Higher Education Institutions: a Data-driven Framework Guided by Institutional and Instructional Analytics (DigiReady+) , KA220-HED - Cooperation partnerships in higher education, Erasmus +	
2022	Personal Research Start-up Grant (Principal Investigator): PSG286 – "Combining Machine-learning and Learning Analytics to provide personalized scaffolding for computer-supported learning activities" , Estonian Research Council	€325 000, 00
2019		€167 375,00

Selected Invited Talks

July, 2023: Invited keynote, The 23rd IEEE International Conference on Advanced Learning Technologies (ICALT 2023). Talk title: "Computational methods for modeling and analysis of learning: Opportunities and Challenges for Artificial Intelligence in Education and Learning Analytics."

February, 2022: Invited talk, Institut für Informatik, Julius-Maximilians-Universität Würzburg (JMU), Germany. Talk title: "Towards personalized, adaptive scaffolding for technology-enhanced learning contexts with the use of learning analytics."

October, 2020: Invited talk, Bernoulli Institute, University of Groningen, the Netherlands. Talk title: "Towards computational systems of human cognition for guiding multifaceted, personalized learning."

July, 2020: Invited talk, Deutsches Forschungszentrum für Künstliche Intelligenz (DFKI), Universität des Saarlandes, Germany. Talk title: "Using computational analytics to provide personalized, adaptive scaffolding in technology-enhanced learning contexts."

February, 2020: Invited talk, Department of Computer Science and Applied Cognitive Science, University of Duisburg-Essen, Germany. Talk title: "From data traces to interventions: Computational Methods in Modeling and Analysis of Learning Processes"

September, 2019: Invited talk at the Learning and Educational Technologies Research Unit, University of Kyoto, Japan (Talk title: "Computational Learning Analytics for Personalized, Adaptive Feedback in Formal Education")

May, 2019: Invited talk at the Institute for Business Informatics, Johannes Kepler University (Talk title: "Computational Learning Analytics to Provide Personalized, Adaptive Scaffolding")

April, 2019: Invited talk at the Institute of Computer Science, University of Tartu (Talk title: "Using data analytics to provide personalized, adaptive feedback in educational contexts and beyond").

December 2018: Invited talk at the European Schoolnet, Learning Research Exchange subcommittee (Talk title: Use of Artificial Intelligence and Machine Learning in OERs and educational portals)

August 2018: Invited talk at the IEEE Estonia Section Meeting at Jänedä, Estonia (talk title: "LA Tartu: Designing a Learning Analytics platform for the University of Tartu... and beyond!")

October 2017: Invited talk at the ScienceEd meetings, University of Pittsburgh

September 2017: Invited talk at the HCII Seminar Talks

DEMOS

Selected Publications

PUBLISHED

- Topali, P., Chounta, I. A., Martínez-Monés, A., & Dimitriadis, Y. (2023). Delving into instructor-led feedback interventions informed by learning analytics in massive open online courses. *Journal of Computer-Assisted Learning*.
- Holmes, W., Persson, J., Chounta, I. A., Wasson, B., & Dimitrova, V. (2022). Artificial intelligence and education: A critical view through the lens of human rights, democracy and the rule of law. *Council of Europe*.
- Aprin, F., Chounta, I.A., & Hoppe, H.U. (2022). "See the Image in Different Contexts": Using Reverse Image Search to Support the Identification of Fake News in Instagram-Like Social Media. In: Crossley, S., Popescu, E. (eds) *Intelligent Tutoring Systems. ITS 2022. Lecture Notes in Computer Science*, vol 13284. Springer, Cham. (best paper award)
- Chounta, I. A., Nolte, A. (2022). The CAT Effect: Exploring the Impact of Casual Affective Triggers on Online Surveys' Response Rates. In *Proceedings of the 2022 CHI Conference on Human Factors in Computing Systems*
- Chounta, I. A., Bardone, E., Raudsep, A., & Pedaste, M. (2021). Exploring teachers' perceptions of Artificial Intelligence as a tool to support their practice in Estonian K-12 education. *International Journal of Artificial Intelligence in Education*, 1-31.
- Katz, S., Albacete, P., Chounta, I. A., Jordan, P., McLaren, B. M., & Zapata-Rivera, D. (2021). Linking Dialogue with Student Modelling to Create an Adaptive Tutoring System for Conceptual Physics. *International Journal of Artificial Intelligence in Education*, 1-49.
- Tanvir, H., Chounta, I-A. (2021) Exploring the Importance of Factors Contributing to Dropouts in Higher Education Over Time. *Proceedings of the 14th International Conference on Educational Data Mining (EDM 2021)*
- Nolte, A.; Chounta, I.A.; Herbsleb, J.D. (2020). What Happens to All These Hackathon Projects? - Identifying Factors to Promote Hackathon Project Continuation. *Proceedings of the ACM on Human-Computer Interaction*, 4 (CSCW2).
- Chounta I.A. (2019) Collaborative Learning and Patterns of Practice. In: Tatnall A. (eds) *Encyclopedia of Education and Information Technologies*. Springer, Cham
- Albacete, P., Jordan, P., Katz, S., Chounta, I. A., & McLaren, B. M. (2019). The Impact of Student Model Updates on Contingent Scaffolding in a Natural-Language Tutoring System. In *Artificial Intelligence in Education (AIED 2019)*.
- Chounta, I.A. (2019). Combining Machine Learning and Learning Analytics to Provide Personalized, Adaptive Scaffolding. In *Proceedings of 13th International Conference on Computer Supported Collaborative Learning (CSCL) 2019*.

- Chounta, I. A., Carvalho, P.F. (2019). Square it up! How to model step duration when predicting student performance. In Proceedings of 9th International Conference on Learning Analytics & Knowledge.
- Albacete, P., Jordan, P., Lusetich, D., Chounta, I. A., Katz, S., & McLaren, B. M. (2018). Providing Proactive Scaffolding During Tutorial Dialogue Using Guidance from Student Model Predictions. In Artificial Intelligence in Education (AIED 2018).
- Chounta, I. A., Carvalho, P.F. (2018). Will time tell? Exploring the relationship between step duration and student performance. In Proceedings of International Conference of the Learning Sciences, ICLS 2018. International Society of the Learning Sciences
- Chounta, I. A., Albacete, P., Jordan, P., Katz, S., & McLaren, B. M. (2017). The "Grey Area": A Computational Approach to Model the Zone of Proximal Development. In European Conference on Technology Enhanced Learning (pp. 3-16). Springer, Cham.
- Chounta, I. A., McLaren, B.M., & Harrell, M. (2017). Building arguments together or alone? Using learning analytics to study the collaborative construction of argument diagrams. In B.K. Smith, M. Borge, E. Mercier, and K.Y. Lim (Eds.), Proceedings of the 12th International Conference on Computer Supported Collaborative Learning (CSCL 2017). (pp. 589-592). Philadelphia, PA: International Society of the Learning Sciences.
- Hecking, T., Chounta, I. A., & Hoppe, H. U. (2016, April). Investigating social and semantic user roles in MOOC discussion forums. In Proceedings of the Sixth International Conference on Learning Analytics & Knowledge (pp. 198-207). ACM

Teaching Experience

Spring,2022 Fall/	Intelligent Learning Environments , Lecturer	<i>Duisburg</i>
Spring,2021 - Present	Praxisproject , Lecturer	<i>Duisburg</i>
Fall,2019- 2021	Introduction to Learning Analytics , Lecturer	<i>Tartu</i>
Spring,2019- 2021	Research in Educational Technology , Lecturer	<i>Tartu</i>
Spring,2020	Quantitative methods in Educational Research (phD) , Lecturer	<i>Tartu</i>

Supervision

2022- present	Lisa Michael , PhD, University of Duisburg-Essen
2021- present	Cleo Schulten , PhD, University of Duisburg-Essen
2020- present	Eric Roldan Roa , PhD, University of Tartu
2019- present	Mahesha Harshani De Silva , PhD, Tallinn University
2018- present	Tiiu Leibur , PhD, University of Tartu

Outreach & Professional Development

PROFESSIONAL MEMBERSHIPS

International Artificial Intelligence in Education Society (IAIED), Program Co-Chair for AIED 2024, Publications Chair for the AIED Conferences 2021, 2022, 2023

International Society of the Learning Sciences (ISLS), Communications Committee Co-chair

Society for Learning Analytics Research (SoLAR), Member

ACM, Member

OUTREACH

2021-2024 **Council of Europe, DGII Education Department**, Provision of consultancy within the scope of Artificial Intelligence project [Report: "Artificial intelligence and education: A critical view through the lens of human rights, democracy and the rule of law"; Survey: "State of Artificial Intelligence and Education in Council of Europe Member States"; Council of Europe Working Conference October 2022]

EDITORIAL BOARD

Educational Technology & Society (ET&S), **Associate Editor**

International Journal of Computer Supported Collaborative Learning (ijCSCL)

PEER REVIEW

International Journals: ijAIED, JLA, Computers & Education, Journal of Computer Assisted Learning

International Conferences: LAK, ECTEL, CSCL, ICLS, AIED, CSCW, CHI