Work address
Department of Human-centered Computing
and Cognitive Science (HCCS)
University of Duisburg-Essen
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47057, Duisburg

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E-mail: irene-angelica.chounta@uni-due.de

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Personal details

- Born on *12 July 1978* in *Athens, Greece*
- Nationality: Greek

Research focus

- **Artificial Intelligence in Education (AIED)**: Learner Modeling (student models and knowledge component modeling, open learner models), Intelligent Tutoring Systems and Personalized and Adaptive Feedback Systems (design and development of intelligent tutoring systems, including LLM-augmented tutors for various STEM domains and education levels), Ethical and Inclusive Artificial Intelligence in Education (Ethics, Policy, and Societal Dimensions of AI in Education; Human rights, democracy, and rule of law as frameworks for AI regulation in education; Polarization and reframing of the generative AI in education discourse; Cognitive dimensions of AI in compulsory education).
- **Learning Analytics**: Computational student-facing and teaching-facing analytical approaches (Learning Dashboards, Engagement monitoring, User requirements elicitation for AI-enhanced learning environments using participatory approaches), Institutional and Curriculum Analytics, Digital Readiness of higher education institutions
- **Computer-Supported Collaborative Learning (CSCL)**: Analytics-informed feedback interventions in MOOCs and collaborative settings; Contingent feedback design for collaborative and online courses; Project–based learning and Hackathons.
- **Human-Computer Interaction (HCI)**: Haptic senses and multimodal immersive learning environments; AI literacy and the acquisition of digital skills; Multimodal interactions and explainable AI for reflective learning; Design and evaluation of educational interfaces and dashboards.

Academic Background

Carnegie Mellon University *Pittsburgh, USA*
Postdoctoral Researcher (Artificial Intelligence in Education) *2016 - 2018*
- Supervisor: Prof. Dr. Bruce McLaren

University of Duisburg-Essen *Duisburg, Germany*
Postdoctoral Researcher (Learning Analytics) *2014 - 2016*
- Supervisor: Prof. Dr. Ulrich H. Hoppe

University of Patras *Patras, Greece*
PhD in Engineering (Human-Computer Interaction) *July, 2014*
- Supervisor: Prof. Dr. Nikolaos Avouris

University of Patras *Patras, Greece*
Diploma in Electrical and Computer Engineering (MSc equivalent) *2005*

ATEI Piraeus *Piraeus, Greece*
BS Undergraduate Degree in Computer Systems Engineering *2000*

Scientific Activities (Professional Experience)

2023-present	**Professor (W2)**, University of Duisburg-Essen, Germany
2021-2023	**Junior Professor (W1)**, 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

(International) Research Stays

March 2026-April 2026	**Visiting Professor**, Kumamoto University, Japan

Professional Activities Outside Universities

- 03/2026 - 06/2026	**AIED Expert Consultancy**, European Parliament, CULT Committee
2021-2025	**AIED Expert Consultancy**, Council of Europe
2019	**Learning Analytics Expert Consultancy**, European Schoolnet

Memberships

- International Artificial Intelligence in Education Society (IAIED), **Executive Committee** (2025 - 2029);
- International Society of the Learning Sciences (ISLS), *Communications Committee Co-chair (Past)*
- European Association of Technology Enhanced Learning (EATEL)
- Association for Computing Machinery (ACM)
- Deutscherhochschulverband (DHV)

Acquired Funds

Third-party funding

2026 - 2029	**DFG Schwerpunktprogramm: Rethinking Disinformation, "The Moral Underpinnings of Disinformation Acceptance in Human-AI-Interaction: The Case of Moral Alignment"**, Own function: PI	*€219 782,00*
2025 - 2028	**Erasmus+ KA220 Cooperation Partnerships (DAAD), "An integrated framework for delivering educational hackathons to support creativity and entrepreneurship in Higher Education Institutions (CoCreate)", grant ID: 2025-1-DE01-KA220-HED-000357232**, Own function: Principal Investigator (PI) / Coordinator	*€400 000,00*
2025 - 2028	**Erasmus+ KA220 Cooperation Partnerships, "Empowering Higher Education Through Ethical and Inclusive AI Integration (AI-PowerED)", grant ID: 2025-1-MT01-KA220-HED-000363292**, Own function: Co-PI	*€400 000,00*
2022 - 2025	**European Commission HORIZON Research and Innovation Actions (RIA), "ugmented Intelligence for Pedagogically Sustained Training and Education (augMENTOR)", grant ID: 101061509**, Own function: Co-PI	*€2 984 312, 50*
2022 - 2025	**European Commission HORIZON Research and Innovation Actions (RIA), "Augmented Intelligence for Pedagogically Sustained Training and Education (augMENTOR)", grant ID: 101061509**, Own function: Co-PI	*€2 984 312, 50*
2022-2025	**Erasmus+ KA220 Cooperation Partnerships, "Digital Readiness in European Higher Education Institutions: a Data-driven Framework Guided by Institutional and Instructional Analytics (DigiReady+)", grant ID: 2021-1-EL01-KA220-HED-000027521**, Own function: Co-PI	*€325 000, 00*
2019 - 2021	**Estonian Research Council (ERC) Personal Research Start-up Grant, "Combining Machine-learning and Learning Analytics to provide personalized scaffolding for computer-supported learning activities", grant ID: PUT PSG286**, Own function: Principal Investigator (PI) and sole submitter	*€167 375,00*

Other funding

2025	**Research Center Trustworthy Data Science and Security - Incubator Grant, "Exploring the impact of AI-generated, adaptive prompts on students' understanding and learning of programming. (aiPROMPT)"**, Own function: Principal Investigator (PI) / Coordinator	*€80 000, 00*

Prizes and Awards

2025	**Best Reviewer Award at ICALT 2025**, IEEE Technical Committee on Learning Technology	
2022	**Best Paper Award: ""See the image in different contexts": Using reverse image search to support the identification of fake news in instagram-like social media"** , International Conference on Intelligent Tutoring Systems (ITS 2022)	
2013	**Erasmus Placement Grant as a Visiting Research to the University of Duisburg-Essen (Duration: 3 months)**, University of Patras	*€1 500, 00*

Academic self-administration

since 2023	**Member in appointment committees**, University of Duisburg-Essen, Germany
since 2024	**Member of the Prüfungsausschusses Bachelor/Master Angewandte Informatik**, University of Duisburg-Essen, Germany
since 2022	**Member of the Aurora Research Council (ARC)**, University of Duisburg-Essen, Germany
since 2024	**Praxis and Forschungsprojekte Coordinator for the MIPSY study program**, University of Duisburg-Essen, Germany
2023-2025	**Coordinator of the HCMT Graduate School**, University of Duisburg-Essen, Germany

Reviewing activities

Associate Editor

Educational Technology & Society (ET&S)

Editorial Boards

- International Journal of Artificial Intelligence in Education (IJAIED)

- International Journal of Computer Supported Collaborative Learning (ijCSCL)

- Journal of Computer-Assisted Learning (JCAL)

Peer Review

International Journals: Journal of Learning Analytics, Computers & Education, IEEE Transactions on Learning Technologies, Instructional Science, Learning and Instruction
International Conferences: Artificial Intelligence in Education (AIED), Learning Analytics and Knowledge (LAK), European Conference on Technology-Enhanced Learning (ECTEL), International Society of the Learning Sciences Annual Meeting (ISLS), IEEE International Conference on Advanced Learning (ICALT), International Conference on Educational Data Mining (EDM), the ACM Conference on Human Factors in Computing Systems (CHI), International Conference on Collaboration Technologies and Social Computing (Collabtech), DELFI Fachtagung Bildungstechnologien, ACM Conference on User Modeling, Adaptation and Personalization (UMAP), Mensch und Computer (MuC).

Organization of conferences and workshops

As Conference Chair

International Conference on Collaboration Technologies and Social Computing (Collabtech), 2020, Tartu, Estonia

As Program Chair

European Conference on Technology-Enhanced Learning (ECTEL), 2026, Valencia, Spain International Conference on Collaboration Technologies and Social Computing (Collabtech), 2025, Jakarta, Indonesia International Conference on Artificial Intelligence in Education (AIED), 2024, Recife, Brazil International Conference on Collaboration Technologies and Social Computing (Collabtech), 2019, Kyoto, Japan

Workshops

- ”Open Learner Models in the Age of Generative AI”, AIED 2026 / Festival of Learning, Seoul
- ”CoCreate: Designing Intentional Educational Hackathons to Support Creativity and Entrepreneurship (CoCreate@ECTEL)”, ECTEL 2026, Valencia
- ”MiXaiÎearn 2026: Multimodal Interactions and Explainable AI for Reflective Physical and Online Learning (MiXaiÎearn 2026)”, ECTEL 2026, Valencia
- ”Multimodal Interactions and Explainable AI for Reflective Physical and Virtual Learning”, AIED 2025, Palermo
- ”AIED for the 4Cs: creativity, collaboration, critical thinking, and communication (AIED4C)”, ECTEL 2025, Newcastle
- ”A Dialogue Lab on the Role of Teachers and AI in Education (TAICo-Dialogue)”, ECTEL 2025, Newcastle
- ”Ethical AI and Education: The need for international regulation to foster human rights, democracy and equity”, AIED 2024, Recife, 2024
- ”AI and Education. A View Through the Lens of Human Rights, Democracy and the Rule of Law. Legal and Organizational Requirements”, AIED 2023, Tokyo, 2023
- ”CoFeeMOOC: Designing Contingent Feedback for Massive Open Online Courses”, EC-TEL 2020
- ”Using Learning Analytics to Design Appropriate, Student-Centered Feedback”, Nordic Learning Analytics Summer Institute (NordicLASI), Tallinn, 2019

Selected Publications

Published

Schulten, C., Nolte, A., & Chounta, I. A. (2027). HackEDX: Towards a methodological framework for Hackathons as educational experiences. Educational Technology & Society, 30(1), 196-212. https://doi.org/10.30191/ETS.202701_30(1).RP11

Sheng, K., Chounta, IA. (2026). Beyond One-Size-Fits-All: Personalizing Computational Proxies of the Zone of Proximal Development Through Help-Seeking Behaviors. In: Blanchard, E.G., Chen, G., Chi, M., Isotani, S. (eds) Artificial Intelligence in Education. AIED 2026. Lecture Notes in Computer Science(), vol 16585. Springer, Cham. https://doi.org/10.1007/978-3-032-29770-9_21

Neubaum, G., Chounta, I.-A., Gredel, E., & Wiesche, D. (2025). A Pandemic for the Good of Digital Literacy? An Empirical Investigation of Newly Improved Digital Skills during COVID-19 Lockdowns. Proceedings of the 2025 CHI Conference on Human Factors in Computing Systems, 1–11. https://doi.org/10.1145/3706598.3713148

Chounta, I.-A., Ortega-Arranz, A., Daskalaki, S., Dimitriadis, Y., & Avouris, N. (2024). Toward a data-informed framework for the assessment of digital readiness of higher education institutions. International Journal of Educational Technology in Higher Education, 21(1). https://doi.org/10.1186/s41239-024-00491-0

Schulze Bernd, N., & Chounta, I. A. (2024, July). Beyond the Grey Area: Exploring the Effectiveness of Scaffolding as a Learning Measure. In International Conference on Artificial Intelligence in Education (pp. 365-378). Cham: Springer Nature Switzerland.

Chounta, I. A., Limbu, B., & van der Heyden, L. (2024). Exploring the Methodological Contexts and Constraints of Research in Artificial Intelligence in Education. In International Conference on Intelligent Tutoring Systems (pp. 162-173). Springer, Cham

Schulze Bernd, N., & Chounta, I. A. (2024). Beyond the Grey Area: Exploring the Effectiveness of Scaffolding as a Learning Measure. In International Conference on Artificial Intelligence in Education (pp. 365-378). Cham: Springer Nature Switzerland.

Schulten, C., & Chounta, I. A. (2024). How do we learn in and from Hackathons? A systematic literature review. Education and Information Technologies, 1-32.

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, IA., & 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

Selected Invited Talks

March, 2026: Invited speaker, Committee on Culture and Education (CULT) – European Parliament. Talk title: "AI in Classrooms: Cognitive Dimensions."

November, 2025: Round table invited speaker, Hellenic Scientific Society for Information and Communication Technologies in Education, 2025. Round table title: "A Human-Centered Approach to the Design and Application of Artificial Intelligence in Education: Opportunities and Challenges."

June, 2025: Invited keynote, Talk Lehre 2025: KI in der Lehre. RWTH Aachen University. Talk title: "Human-centered design approaches for using Artificial Intelligence to support teaching and learning."

October, 2024: Invited keynote, Trends Conference, Open University Netherlands. Talk title: "Research designs for Artificial Intelligence in Education: Promoting Fairness and Ethics through Evidence-Based, Human-Centered Methodological Approaches."

May, 2024: Invited keynote, The 18th EATEL Summer School on Technology Enhanced Learning 2024 (JTELSS 2024). Talk title: "Reflecting on the premise of Intelligent Tutoring Systems and Student Modeling for personalization and adaptation of learning."

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 Jäneda, 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

Teaching

Overview of offered courses

Course	Level & Program	Institution	Period
Introduction to Programming (Grundlegende Programmiertechniken)	Bachelor, Menschzentrierte Informatik und Psychologie (MIPSY)	University of Duisburg-Essen	since Winter Semester 2025/26
Learning Analytics	Master, Menschzentrierte Informatik und Psychologie (MIPSY) / Angewandte Informatik	University of Duisburg-Essen	since Winter Semester 2025/26
Intelligent Learning Environments	Master, Menschzentrierte Informatik und Psychologie (MIPSY) / Angewandte Informatik	University of Duisburg-Essen	since Summer Semester 2022
Introduction to Learning Analytics	Master, Educational Technology	University of Tartu	Fall Semester, 2019–2021
Research in Educational Technology	Master, Educational Technology	University of Tartu	Spring Semester, 2019–2021
Quantitative Methods in Educational Research	PhD, Educational Technology	University of Tartu	Spring 2020

Note: Course evaluation reports are attached at the end of this CV.

Other

- Praxis- and Forschungsprojekte (practical and research projects) and seminars, Bachelor/Master level, Faculty of Computer Science, University of Duisburg-Essen (2021–present)

Supervision

University of Duisburg-Essen

Postdoctoral Researchers

- Dr. Bibeg Limbu (2022 – present)

University of Duisburg-Essen

Doctoral Students

- Cleo M. Schulten (2021 – 2026, *Graduated*)
  - Role: Primary supervisor
  - Thesis: *"Learning in Hackathons: Proposing a methodological framework for the design, implementation and evaluation of interest-driven, community-based events"*
- Kaimao Sheng (2025 – present)
  - Role: Primary supervisor
  - Thesis: *"Theory-informed Design of Personalized Computational Proxies for Learning in Intelligent Learning Environments"*
- Mona Muenstermann (2025 – present)
  - Role: Primary supervisor
  - Thesis: *"An integrated framework for authoring automated feedback using Artificial Intelligence"*

Tallinn University

- Liyanachchi Mahesha Harshani De Silva (2019 – present, *To graduate in September 2026*)
  - Role: Co-supervised with Dr. María Jesús Rodríguez-Triana
  - Thesis: *"Human-centered Curriculum Analytics"*

Master's & Bachelor's Students

- Supervised more than 20 Master's and 40 Bachelor's students from Computer Science, Electrical Engineering, Educational Technologies, and related fields.