CV Supplmenent 2—List of Selected Publications

[1] **Viktor Senderov**, Jan Kudlicka, Daniel Lunden, Viktor Palmkvist, Mariana P Braga, Emma Granqvist, David Broman, and Fredrik E Ronquist. Treeppl: A universal probabilistic programming language for phylogenetics. *bioRxiv*, 2023. *I am the lead designer of te TreePPL language and a major developer of the compiler. I wrote the draft of the paper except for Section 3. I am responsible for organizing work within the team of TreePPL and for the TreePPL popularization by means of course materials, websites, symposium events.* doi:10.1101/2023.10.10.561673.

[2] **Viktor Senderov**, Fredrik Ronquist, Jan Kudlicka, Johannes Borgström, Nicolas Lartillot, Daniel Lundén, Lawrence Murray, Thomas B Schön, and David Broman. Universal probabilistic programming offers a powerful approach to statistical phylogenetics. *Communications biology*, 4(1):244, 2021. Q1, IF: 6.5, Citations: 29. *I have equal contribution together with FR and JK. I participated since the early rounds of brainstorming and collaboration as to the applications of PPL in phylogenetics. I was in charge of WebPPL. I wrote a large part of the supplementary materials, as well as figures in the main text. I ran computational verification.* URL: https://www.nature.com/articles/s42003-021-01753-7.

[3] **Viktor Senderov**, Kiril Simov, Nico Franz, Pavel Stoev, Terry Catapano, Donat Agosti, Guido Sautter, Robert A Morris, and Lyubomir Penev. OpenBiodiv-O: ontology of the OpenBiodiv knowledge management system. *Journal of biomedical semantics*, 9:1–15, 2018. Q1, IF: 1.67, Citations: 52. *I developed the ontology based on my own original ideas and ideas by Berendsohn and Franz. I encoded the ontology in OWL. I wrote the manuscript and used the ontology as the underlying data schema of the OpenBiodiv database.* URL: https://jbiomedsem.biomedcentral.com/articles/10.1186/s13326-017-0174-5.

[4] Daniel Lundén, Joey Öhman, Jan Kudlicka, **Viktor Senderov**, Fredrik Ronquist, and David Broman. Compiling Universal Probabilistic Programming Languages with Efficient Parallel Sequential Monte Carlo Inference. In *ESOP*, pages 29–56, 2022. Excellence in Computing Research Rank: A, Citations: 7. *I contributed to the discussion that led to CorePPL. I contributed to the benchmarking of CorePPL by developing phylogenetics scenarios. I provided the hardware and the operating system for the artefact creation for the conference.* URL: https://link.springer.com/chapter/10.1007/978-3-030-99336-8_2.

[5] **Viktor Senderov** and Lyubomir Penev. The Open Biodiversity Knowledge Management System in Scholarly Publishing. *Research Ideas and Outcomes*, 2:e7757, 2016. Q1, IF: 2.5, Citations: 19. *I am the chief architect and developer of OpenBiodiv. I wrote the manuscript and the roadmap for future semantic database development at Pensoft.* URL: https://riojournal.com/article/7757/.

[6] Lyubomir Penev, Daniel Mietchen, Vishwas Chavan, Gregor Hagedorn, Vincent Smith, David Shotton, Éamonn Ó Tuama, **Viktor Senderov**, Teodor Georgiev, Pavel Stoev, et al. Strategies and guidelines for scholarly publishing of biodiversity data. *Research*

Ideas and Outcomes, 3:e12431, 2017. Q1, IF: 2.5, Citations: 59. *I am the author of several templates for Biodiversity Data Journal (BDJ) as well as automated workflows for data-paper and occurrence data integration. I was technical lead of BDJ during my PhD.* URL: https://riojournal.com/article/12431/.

[7] Pedro Cardoso, Pavel Stoev, Teodor Georgiev, **Viktor Senderov**, and Lyubomir Penev. Species Conservation Profiles compliant with the IUCN Red List of Threatened Species. *Biodiversity Data Journal*, 4, 2016. Q2, IF: 1.5, Citations: 24. *I conceptualized the digital publication equivalent of the IUCN red list database entry and developed an automated flow linking the two.* URL: https://bdj.pensoft.net/article/10356/.

[8] **Viktor Senderov**, Teodor Georgiev, and Lyubomir Penev. Online direct import of specimen records into manuscripts and automatic creation of data papers from biological databases. *Research Ideas and Outcomes*, 2, 2016. Q1, IF: 2.5, Citations: 10. *I conceptualized and wrote the source code for automatic data paper creation and for automatic import of specimen records. I wrote the manuscript.* URL: https://riojournal.com/article/10617/.

[9] Mariya Dimitrova, **Viktor E Senderov**, Teodor Georgiev, Georgi Zhelezov, and Lyubomir Penev. Infrastructure and population of the OpenBiodiv biodiversity knowledge graph. *Biodiversity Data Journal*, 9, 2021. Q2, IF: 1.5, Citations: 6. *I am the original author of the software package for parsing papers into OpenBiodiv and of the initial software architecture and helped draft the manuscript.* URL: https://bdj.pensoft.net/article/67671/instance/6820326/.