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Christos Sourmpis
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Education

2019–Present **Ph.D. in Computational Neuroscience**, *EPFL*, Lausanne, Switzerland.

- Ph.D. Advisors: Prof. Wulfram Gerstner and Prof. Carl Petersen
- Research: Data-constrained spiking recurrent neural network for sensor-to-motor pathways.
- Collaborated on experimental data analysis pipelines.

2013–2018 **Diploma in Electrical and Computer Engineering**, *University of Patras*, Patras, Greece.
GPA: *9.13/10*, Ranked first of my year

2017–2017 **Erasmus Exchange Program**, *Graz University of Technology*, Graz, Austria.

Industry Experience

2019 **R&D Engineer**, *SynSense - Neuromorphic Hardware Company*, Zurich, Switzerland.
Continued work on the same project with a focus on hardware constraints. Investigated other methods for speech processing, e.g., Self-Organized Map with Tempotron inference.

2018–2019 **Internship**, *SynSense - Neuromorphic Hardware Company*, Zurich, Switzerland.
Research on audio signal to spikes conversion methods (silicon cochlea models). Developed an end-to-end pipeline system for keyword detection using a static spiking neural network reservoir.

Publications

2023 **Sourmpis C**, Petersen CCH, Gerstner W, & Bellec G. Trial matching: capturing variability with data-constrained spiking neural networks. Thirty-Seventh Conference on Neural Information Processing Systems (NeurIPS)

2023 Oryshchuk A, **Sourmpis C**, ..., Petersen CCH & Crochet S. Distributed and specific encoding of sensory, motor and decision information in the mouse neocortex during goal-directed behavior. Accepted in Cell Reports.

2023 Bech P, Crochet S, ... Petersen CCH & **Sourmpis C**. Striatal Dopamine Signals and Reward Learning. Function.

Languages

Greek Native

English Advanced proficiency *IELTS 7.5/9 – C1*

German	Basic proficiency	*Goethe Zertifikat B1*

Skills

Programming	Python, Matlab	Advanced
Languages	Java, C/C++	Good
Other Skills	working in an interdisciplinary team, exploring new tools, efficient communication, co-organizing events for my doctoral program	
Hobbies	podcasts, watching movies, strength training, socializing with friends and colleagues	