EUROPEAN CURRICULUM VITAE FORMAT

PERSONAL INFORMATION

Name	**BERK TAN PERÇIN**
Address	**VIA ORESTE VANCINI 4, 40134, BOLOGNA, BO, ITALY**
Telephone	**+39 327 456 7509, +90 538 571 6238**
E-mail	**btpercin@gmail.com**
Nationality	Turkish
Date of birth	19.08.1996
Interested Research Areas	STOCHASTIC AND DETERMINISTIC MODELS OF BIOLOGICAL/CHEMICAL/PHYSICAL PHENOMENA. PROBABILITY THEORY, COMPLEX SYSTEMS.

TEACHING EXPERIENCE

• Dates (from – to)	**FALL SEMESTER OF 2023**
• Name and address of experience	University of Bologna, Stats & Maths Bachelor's Program
• Occupation or position held	Tutor
• Main activities and responsibilities	I did the tutorship of Probability II course of Stats & Maths bachelor's program of University of Bologna in fall semester 2023, given by Prof. Pietro Rigo. The topics covered: Sigma algebras, random variables and Borel sigma algebra, mass and density functions, the characteristic functions, conditional probability and densities, independence and covariance, random vectors, convergence types (almost surely, in probability, in density or in integrable spaces), Laws of Large Numbers and lastly Central Limit Theorem.

• *Dates (from – to)*	***FALL SEMESTER OF 2022 AND 2023***
• Name and address of employer	University of Bologna, Quantitative Finance Master's Program
• Occupation or position held	Tutor
• Main activities and responsibilities	I did the tutorship of the Stochastic Processes course of Quantitative Finance master's program of University of Bologna given by Prof. Alberto Lanconelli in fall semester of 2022 and 2023. The topics covered Brownian motion, Itô Integrals, Itô Formula and applications of well known Stochastic Differential Equations.

• Dates (from – to)	**FALL SEMESTER OF 2023**
• Name and address of employer	University of Bologna, Statistical Sciences Master's Program
• Type of business or sector	Tutorship
• Occupation or position held	*Tutor*
• Main activities and responsibilities	I did the tutorship of Probability Crash Course of Statistics master's degree program of University of Bologna given by Prof. Cinzia Viroli in fall semester of 2023. The topics included: random variables, random vectors, density and mass functions (joint and marginal), expectation and variance, independence and covariance, transformation of random variables.

EDUCATION AND TRAINING

• Dates (from – to)	01.11.2021 – 31.10.2024
• Name of the Program and the Institution	Statistical Sciences PhD, University of Bologna
• Description	Currently I am a PhD student in Statistical Sciences in University of Bologna. My main research areas in this program are Stochastic Differential Equations and Malliavin Calculus applied in Reaction-Diffusion Kinetics. My supervisor is Prof. Alberto Lanconelli from Statistical Sciences Department.
• Thesis Title	Usage of Malliavin Calculus to Analyze Reaction-Diffusion Phenomena
• Title of qualification	PhD

• Dates (from – to)	September 2019 – October 2021
• Name of the Program and the Institution	Physics, Master's Program, University of Bologna
• Final Grade	110/110 con lode
• Description	I graduated from Applied Physics curriculum with 110 with Honors out of 110. This department introduced me the topic of Stochastic Processes, which is a field I mainly improved myself in. I believe it is a very useful field in other sciences as well (Biology, Chemistry etc.). I did my thesis with Prof. Alberto Lanconelli from Statistical Sciences department in University of Bologna, involving Stochastic Differential Equations applied on an epidemic model, analyzed them and supported our theoretical findings with Monte Carlo simulations.
• Thesis Title	On a new method for the stochastic perturbation of the disease transmission coefficient in SIS Models
• Title of qualification	MSc

• Dates (from – to)	September 2014 – June 2019
• Name of the Program and the Institution	Molecular Biology and Genetics, Bachelor's Program, Bilkent University
• Final Grade	3.66/4.00, High Honour
• Description	I started to this department with comprehensive scholarship. I improved myself in cell biology, genomics, stem cell biology and in wet lab skills. I graduated with 3.66/4.00 CGPA with high honors.
• Thesis Title	Using immune-repressive molecules (i.e., suppressive ODN) against autoimmune diseases like Scleroderma on mice model.
• Title of qualification	BSc

• Dates (from – to)	September 2017 – June 2019
• Name of the Program and the Institution	Physics, Minor Program, Bilkent University
• Final Grade	3.90/4.00, High Honour
• Description	I did a minor program in Physics while I was studying in Molecular Biology and Genetics Department. I improved myself in Quantum Mechanics, Statistical Mechanics, Condensed Matter Physics and in my wet lab skills. My CGPA is 3.90/4.00 and I believe this minor program improved my interdisciplinary skills.
• Title of qualification	Minor degree certificate

• Dates (from – to)	Summers of 2016, 2017 and 2018
• Name of the Program and the Institution	Summer Internship, 03.06.2016 – 12.08.2016, CECAD, Cologne, Germany Summer Internship, 05.06.2017 – 09.08.2017, University of Oxford, UK Summer Internship, 01.07.2018 – 31.08.2018, Johannes Gutenberg University (JGU), Germany
• Description	In CECAD, I studied as an intern about aging and cell apoptosis in C. elegans in Björn Schumacher's lab.I improved my wetlab skills, such as: Western Blotting and microinjection. In University of Oxford I worked to generate cell lines with various reporters, searched the affect of TNF-α on HCV infection, modeled on Huh-7 cells and improved myself in immunology topic and cell culture. In JGU my Project was about post-transcriptional modifications of RNA. I was responsible of production of the AlkB enzyme required for demethylation of tRNAs and purifying it. In addition to improving my wet lab skills in different molecular biology techniques, because I was also involved with the planning of the experiments,
Conferences:	
• Description:	Speaker in "Stochastic Processes in Evolutionary Biology", 20-24 May 2024, CIRM, Marseille.
Publications:	Lanconelli, A., Perçin, B. T. (2022). On a new method for the stochastic perturbation of the disease transmission coefficient in SIS models. Applied Mathematics and Computation, 413, 126600. https:// doi.org/10.1016/j.amc.2021.126600 Lanconelli, A., Perçin, B. T. (2024). Analysis of the chemical diffusion master equation for creation and mutual annihilation reactions. Journal of Mathematical Physics, 65 (3), 033502. https://doi.org/10.1063/5.0163100 Lanconelli, A., Perçin, B. T. Razo M. J. d. (2023). Solution formula for the general birth-death chemical diffusion master equation. arXiv Preprint. https://doi.org/10.48550/arXiv.2302.10700 Lanconelli, A., Perçin, B. T. (2024). A new look to branching Brownian motion from a particle based reaction diffusion dynamics point of view, arXiv:2401.11045, https://doi.org/10.48550/arXiv.2401.11045 Bernardi E., Lauria C. S. A., Lanconelli, A., Perçin, B. T. (2024). Non trivial optimal sampling rate for estimating a Lipschitz-continuous function in presence of mean-reverting Ornstein-Uhlenbeck noise, arXiv:2405.10795, https://doi.org/10.48550/arXiv.2405.10795
MOTHER TONGUE	**TURKISH**
OTHER LANGUAGES	**ENGLISH – TOEFL IBT TEST**
• Reading	HIGH - 27/30
• Speaking	HIGH - 27/30
• Listening	HIGH - 28/30
• Writing	FAIR - 23/30
	ITALIAN
• *Level*	BASIC - INTERMEDIARY
	GERMAN
• *Level*	BASIC
COMPUTER SKILLS	PYTHON, MATLAB, LATEX
REFERENCES	FOR ANY REFERENCES, FEEL FREE TO GET IN TOUCH WITH PROF. ALBERTO LANCONELLI ON ALBERTO.LANCONELLI.2@UNIBO.IT