Serkan Shentyurk (Şentürk)

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EDUCATION University College London (UCL), London, UK

PhD, Optical Biology

2024 - Present

2022 - 2024

2018 - 2022

KU Leuven, Flanders, Belgium

MSc, Statistics and Data Science

cGPA: 14.1/20.0

Honour: cum laude

Bilkent University, Ankara, Turkey

BSc, Molecular Biology and Genetics Honour: Summa cum laude

cGPA: 3.8/4.0

EXPERIENCE

Research Assistant

NERF - Gonçalves Lab

2023 - 2024

Application of computational methods to the neuroscience problems.

- Applied machine learning models to derive mechanistic insights about the pyloric network in response to perturbations.
- Modelled and simulated E-I network models to explain the experimental data.

Research Assistant

Bilkent University - Konu Lab

Building GUI with R Shiny for High-throughput Analysis of Measured Sequential Images application

Research Assistant

Bilkent University - Kafaligonul Lab

2021 - 2022

Exploratory Analysis of Zebrafish behaviour data by applying different Linear Models

Tutor

Bilkent University - CS Department

2021 Fall

Tutored, guided students and answered questions at CS115 - 'Introduction to Programming in Python' course laboratory sessions.

Research Assistant

NERF - Bonin Lab

2021 Summer

Research the effects of water deprivation, size stimulus, and longitudinal imaging on retinotopy.

- Performed skull-clearing surgeries and post-surgery care.
- Did wide-field Ca++ imaging and analyzed the images.
- Prepared the pipeline for image analysis for further research.

Research Assistant

NERF - Bonin Lab

2020 Summer

Did mice handling, post-surgery care, and behavioural training.

Student Intern

Bogazici University - Fuss Lab

2019 Summer

Handled and crossed *Drosophila*, performed dissection and IHC.

HONOURS &
ACCOLADESWellcome PhD Studentship2024 - 2028KU Leuven - Peter Rousseeuw Scholarship2022 - 2024Erasmus+ Student Mobility for Traineeships Program2021Scientific Research Council of Turkey - Undergraduate Scholarship2020 - 2022Bilkent University - Comprehensive Undergraduate Scholarship2018 - 2022Tan College - High School Full Scholarship2012 - 2016

SKILLS Laboratory Skills:

Handling with *Drosophila* and mice, Skull Clearing Surgery and Behavioral Tests with mice, Wide-field Ca++ imaging.

Languages:

Python, R (proficient), SAS (intermediate), SQL, HTML/CSS, MATLAB, Cypher (familiar).

Statistics - Data Science:

Generalised Linear Models, Multivariate Statistics, Time-Series Analysis, Autoregressive Models, Wavelet Analysis, Data Mining, Data Scraping, Exploratory Analysis, Decision Trees, SVMs, Feedforward Neural Networks (proficient), Reinforcement Learning, Mixed Models, Meta-Analysis (familiar) Dashboarding (Plotly Dash, Streamlit, Stackblitz, R Shiny).

EXTRA-CURRICULAR ACTIVITIES

Positions:

- Vice President, Bilkent Genetics Society
 Bilkent University
 2019 2020
- **Head of International Career**, Scientific Research Society 2017 2018 Hacettepe University
- Volunteer, Turkish Foundation for the Protection of Nature 2014 2022

Activities:

- Co-organiser, 'Horizons in Molecular Biology and Genetics' and 'Neuroscience Days' at Bilkent University.
- Organiser, 'Medical Residency in the US and Germany' conferences at Hacettepe University.

Sports:

- Basketball, played at high school team and amateur club (1 Bronze,1 Silver, 4 Gold medals).
- \bullet Ice Hockey, team member of Hacettepe University Ice Deers.

LANGUAGES

Turkish (native), English (fluent), German (beginner).

REFERENCES

Pedro Gonçalves, PhD:

pedro.goncalves@nerf.be

NeuroElectronics Research, Flanders (NERF) - Leuven, Belgium

Aslı Ayaz, PhD: asli.ayaz@nerf.be

NeuroElectronics Research, Flanders (NERF) - Leuven, Belgium

Özlen Konu, PhD: konu@fen.bilkent.edu.tr

Bilkent University - Ankara, Turkey

Vincent Bonin, PhD: vincent.bonin@nerf.be

NeuroElectronics Research, Flanders (NERF) - Leuven, Belgium