

# Bilgin Sherifov

## PERSONAL STATEMENT:

- Background in science and applied maths (degrees in physics and neuroscience)
- Experienced with and passionate about data analysis and modelling
- Additional experience in such diverse jobs as construction project-management, web-development, and primate neurophysiology lab assistantship
- Used to multidisciplinary work and good at transferring knowledge from one field to another

## WORK EXPERIENCE:

2016, August – present

### Senior Data Scientist

On The Beach PLC, Manchester, UK

- Collected data and developed econometric models for measuring impact of offline and online ad campaigns (dynamical systems modelling using Kalman filters, various regressions, and RNNs)
- Worked on improving algorithms for product placement in on-site search results (personalization and recommendation systems)
- Working on image labelling
- Worked on improving company's bids for keywords in Google Pay-Per-Click (PPC) searches
- Worked on improving the tools for split-test analysis
- Analyzed user journeys and behavior and building models to predict propensity to purchase
- Built automatic visualizations for various marketing-related measures
- Built simulations of various processes to be analyzed and modeled
- Helped bring insights, on a daily basis, to various members of the marketing team
- Recruited, trained, and lead junior data scientists

2012, June – 2015, December

### Web Developer and Statistical Analyst

Jobs.bg, Sofia, Bulgaria

- Developed a platform for web-based test creation and administration
- Developed algorithms for web-based adaptive testing
- Built interactive online data visualizations

2011, July – 2012, January

### Project Manager and Business Analyst

STS International, Inc., Sofia, Bulgaria

Project Management:

- Planning, executing, and closing projects according to strict deadlines and budget.

Business Analysis:

- Analyzing, documenting, and proposing business solutions
- Preparing functional specifications and evaluating the impact of proposed solutions on revenues, costs, and the work load of the personnel

2007, June – 2011, February

### Project Development Manager

ACE International Ltd., Sofia, Bulgaria

Real Estate Project Development (residential, offices, commercial):

- Market research and sales price forecasting based on my own models
- Identifying and contacting potential end users (corporate and private clients)

- Preparing feasibility studies
- Directly reporting to the board of directors

Managing the Construction Process of Ongoing Projects:

- Identifying and planning stages of construction, including time tables and payment graphics
- Contracting subcontractors for all types of works involved in the construction process
- Monitoring the progress of subcontractors and coordinating their works
- Planning, monitoring, and coordinating payments to subcontractors

Organizing Tender Applications for Major Construction Works:

- Preparing detailed Bill of Quantities
- Putting together all tender documents
- Negotiating with investors

2005, November – 2006, May

**Research Assistant**

Boston University, Boston, MA, USA

Worked under the supervision of Stephen Grossberg & Gail A. Carpenter on developing theoretical models of human cognitive categorization and classification processes by developing certain artificial neural networks and then doing statistical analysis of model outputs and empirical data.

2004, September – 2005, August

**Research Assistant**

Boston University, Boston, MA, USA

Worked under the supervision of Alan Saul and Max D. Snodderly in an experimental research assistantship position in a primate neurophysiology lab.

2002, September – 2004, September

**Research Assistant**

Boston University, Boston, MA, USA

Worked under the supervision of Michele Rucci in a research assistant-ship position as data analyst and developer of models of neurons in the primary visual area of primate cortex.

2001, September – 2002, August

**Research Assistant**

Boston University, Boston, MA, USA

Worked under the supervision of Stephen Grossberg & Gail A. Carpenter on developing theoretical models of human cognitive categorization and classification processes.

2001, September – 2001, December

**Teaching Assistant**

Boston University, Boston, MA, USA

Worked under the supervision of Michele Rucci in a teaching assistantship position for an Applied Math course.

1998, September – 2000, June

**Teaching Assistant**

Koc University, Istanbul, Turkey

Worked under the supervision of Haluk Resat, Alim Ormeci, Alphan Sennaroglu, and Ali Serpenguzel in a teaching assistant-ship position for the following undergraduate courses:

General Physics I & II	Statistical Physics	Experimental Physics
Modern Physics	Quantum Mechanics I & II	Semiconductor
Classical Mechanics	Electromagnetism	Physics and Devices

## EDUCATION:

2003, September – 2006, September **Boston University, Boston, MA, USA**  
Department for Cognitive and Neural Systems  
Ph.D. in Neurosciences (Graduate Fellowship,  
degree not awarded)

Thesis Title: *Predicting the Response of Cells in Primate Early Visual System.*

Developed computational models of cell types in the primary visual cortex of primates, using data from extra-cellular recordings from awake animals. Prior studies in the field had been focused on characterizing the linear response of the cells in the area: either the *frequency response* (using periodic stimuli, such as gratings) or the *impulse response* (using randomly flashed bars). Crucially, not much attempt had been made to see how these models replicate the response to richer stimuli, such as natural scenes.

We aimed at going beyond this: to build non-linear models that would replicate cell responses to natural images.

2000, September – 2003, May **Boston University, Boston, MA, USA**  
Department for Cognitive and Neural Systems  
M.A. in Neurosciences (Graduate Fellowship,  
GPA: 3.68 / 4.0)

### Major Field Courses:

Computational Neuroscience I & II  
Mathematical Neural Modelling I & II  
Speech Models I & II  
Vision Models I & II  
Movement Models  
Memory Models

### Engineering Courses:

Image/Signal Reconstruction & Restoration  
Stochastic Processes  
Stochastic Model Engineering  
Recursive Estimation & Optimal Filtering  
Dynamic Systems Theory  
Digital Signal Processing

1995, September – 1999, May **Koç University, Istanbul, Turkey**  
B.S. in Physics (Koç University Fellowship, GPA:  
3.86 / 4.0)

## COMPUTER SKILLS:

- Python, R, Keras w/ TensorFlow, PyTorch, OpenCL (PyOpenCL), Matlab, Simulink
- PHP, JavaScript (including jQuery, D3.js, and AJAX), MySQL, HTML 5
- Apache Mahout, Apache Lucene, Apache Spark (all three with little experience), Pentaho Modrian
- FORTRAN, C (little experience)

## LANGUAGES:

English, Bulgarian, Turkish (mother tongue), Russian (intermediate), Italian (intermediate)