Bayar I. Menzat

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EDUCATION

October 2013 -

- University of Oxford – DPhil candidate Life Sciences Interface DTC (4 years program)
  Modules studied include:
  - Mathematical Biology
  - Systems Biology
  - Bayesian Statistics
  - Computational neuroscience

October 2010-June 2013

- University of Essex – BSc Computer Science (1st – 82%)

  Modules studied include:
  Programming in MatLAB
  - Operating Systems
  - Natural Language Engineering
  - C++ Programming
  - Computer Vision
  - Genetic Programming

- Baccalaureate Diploma (Overall mark – 93.9%)
  A Level: Mathematics (A – 100%)

WORK EXPERIENCE

June 2014 – October 2014

- **Research Rotation in Computational Biology**
  Computer Science, Oxford University

Responsibility Create a discrete cellular model using dynamic reference state. Implement a mathematical framework based upon the use of a dynamic reference state, which allows the mechanical properties to change realistically in response to deformation.

April 2014 – June 2014

- **Research Rotation in Computational Neuroscience**
  Vogels Lab, Oxford University

Responsibility Develop an integrate-and-fire neural model with plastic synapses. The purpose of this project is to try to understand what are the plasticity mechanisms that the brain uses during learning and the role of inhibitory neurons , by focusing on inhibitory to excitatory (I-E) synapses and examining how they affect the activity of other neurons.

October 2012 – June 2013

- **Application development and maintenance intern**
  UK DATA ARCHIVE

Responsibility Develop applications using the .NET architecture in C#. Investigate and implement searching algorithms for a data archive using NLP.

June 2012- August 2012

- **Temporary Research Officer**
  Game Intelligence Group Essex University

Responsibility Research done on the Kinect camera, develop a framework for gesture controlled 3D games. More information at : http://www.dtc.ox.ac.uk/people/13/menzatb/

November 2011- March 2012

- **Student Assistant**
  Embedded and Intelligent Systems (EIS) Research Group Essex University

Responsibility Research in Computer Vision – Data analysis, creating applications and scripts in C++, Python using feature detectors for image stitching, task automation

Skills gained: finishing a project before a deadline, problem solving; software design; team working, using the C++ OpenCV library.

VOLUNTARY WORK

September 2011- June 2012

- **Resident Assistant Essex University Resident Support Network**

Responsibility: Help student welfare issues, organize social gatherings for students and provide moral support.
Skills gained: Team work and communication skills.

ACHIEVEMENTS

- **Paper published in conference (2011)**

"Memory-Efficient Design Strategy for a Parallel Embedded Integral Image Computation Engine" by Shoaib Ehsan, Adrian F. Clark, Wah Man Cheung, Arjunsingh M. Bais, Bayar I. Menzat, Nadia Kanwal and Klaus D. McDonald-Maier - The 15th Irish Machine Vision and Image Processing Conference (IMVIP 2011), Dublin, Ireland, 7th-9th September 2011"

- **CSEE Final Year Project Prize (1st)**
- **IET Present Around the World Prize (1st prize local branch)**

OTHER SKILS

I have excellent communication skills and team working experience that is split in industrial and research internships. My IT skills include:

- Excellent knowledge of C++, Python
- Good knowledge of Java , Matlab
- Comfortable with using Linux for software development

I have experience in implementing computer vision algorithms and creating gesture recognition frameworks using the Kinect. I am currently working with the gesture recognition framework I created to explore how it might be used to enhance learning for pupils.

I am a native speaker of Romanian and proficient in speaking and writing in English, French and Spanish.

INTERESTS

- I enjoy using my language skills for translating and writing short stories, poetry, scientific articles etc.

REFERENCES

Available on request.