# **Martin Andreev Asenov**

#### **Education**

## The University of Edinburgh: MRes + Ph.D. in Robotics and Autonomous Systems

Sep 2016 – current

Supervised by Dr. Subramanian Ramamoorthy

#### The University of Edinburgh: BSc (Hons) Artificial Intelligence and Computer Science

2012 - 2016

- "Visual illusions and interactions in biologically inspired neural networks", supervised by Dr. Mark van Rossum
- Activities: Informatics School Representative, Class Representative, International Center Volunteer
- Rowing: Silver medal in BUCS Regatta, gold medal in Scottish Boat Race

## The University of California, Irvine: International Exchange Student

2014 - 2015

- Favorite courses: Neural Networks and Deep Learning, Image Understanding, Computer Photography and Vision
- Activities: Astronomy Club, Rowing

## **Work Experience**

#### Software Integration and Characterization Developer; Thales Avionics; Irvine, California, USA

July - August 2015

- Able to save two million dollars, due to reduced test creation and execution time (estimated for the next five years)
- Extended the Google's Blockly visual programming editor to a test automation tool
- Assisted in training a support vector machine, able to estimate performance tests, without actually running them

## Math Tutor and Web Developer; Avid Academy for Gifted Youth; Irvine, California, USA December 2014 – May 2015

- Prepared students for the AIME and AMC math competitions
- Developed educational-focused web content management system using Django

## Web developer; Edinburgh University Students Association (EUSA); Edinburgh, UK

April - September 2014

- IT support for more than 30 venues during Edinburgh Fringe, the largest art festival in the world
- Participated in all phases of EUSA's websites development cycle
- Developed web content management system using Django
- Web server management, including recovering after our servers were compromised

#### Junior Programmer; Commquest Ltd; Sofia, Bulgaria

**June – July 2013** 

- Developed crossword game for the iPhone using Objective-C
- Developed Android game using PhoneGap

## **Projects**

#### **Convolutional Neural Networks**

- Developed neural network, able to extract 3D information from a single, unedited picture
- Trained on MPI Sintel Dataset, computer generated movie with camera, motion and disparity information

#### Autonomous quadcopter

- Won Dean's Choice award
- Implemented path finding and obstacle avoidance using LIDAR, compressing observed data using octree
- Team leader of the AI/CV part of the team

#### **Smart Data Hack**

- Won award for best UI
- Using a database from the Edinburgh Council our team created 3d interactive cube-map

## **Barclays Hackathon**

- Developed system similar to Google Now/Apple's Siri, but for phones which don't have Internet connection
- Sending a text message with a question to a special number, a response with the answer is sent back

## **Skills**

Leadership: Team leader of more than 50 students for building autonomous quadcopter

Languages: Bulgarian (native), English (fluent)

Cross-cultural: Lived in USA, Scotland and Bulgaria. Traveled to more than 20 different countries