# Curriculum Vitae - Victoria Mazo, PhD

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# **EMPLOYMENT**

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|-----------------------|---|
| <i>2016 – present</i> | Deep Learning Researcher, Zebra Medical Vision                      |
|                       | Developed and implemented applications for detection of pathologies |
|                       | in lungs CT and brain CT using the Semantic Segmentation approach   |
|                       | and Generative Adversarial Networks.                                |
| 2014 –2016            | Researcher, Cyberbit (formerly Intelligence division at Nice)       |
|                       | Developed and implemented applications for osint (open source       |
|                       | intelligence) and surveillance, such as Face Liveness Detection,    |
|                       | Image Captioning, Sentiment Analysis and Semantic Similarity        |
| 2009 - 2014           | Teaching Assistant, Bar Ilan University                             |
| 2007 - 2009           | Process Engineer, Intel   |
|                       | Analyzed with statistical methods and improved quality of gates in  |
|                       | transistor manufacturing  |
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# **EDUCATION**

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|-------------|---|
| 2009 - 2014 | PhD in Physics, Bar Ilan University                                   |
|             | Field: Theoretical Condensed Matter Physics                           |
|             | Dissertation Title: "Monolayer and Bilayer Graphene Ribbons in a      |
|             | Strong Magnetic Field"  |
|             | Dissertation Adviser: Prof. E.Shimshoni                               |
| 2012 - 2014 | M.Sc. in Financial Mathematics, Bar Ilan University                   |
| 2003 - 2007 | M.Sc. in Physics, Tel Aviv University                                 |
|             | Field: Theoretical High Energy Physics, String Theory                 |
|             | Thesis Title: "On AdS/CFT Models"                                     |
|             | Thesis Advisers: Prof. J.Sonnenschein (Tel Aviv University) and Prof. |
|             | N.Obers (Niels Bohr Institute, Denmark)                               |
| 2000 - 2003 | <b>B.Sc. in Physics</b> , Bar Ilan University                         |
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### KNOWLEDGE AND COMPETENCIES

- Experienced in Deep Learning and Machine Learning
- Excellent analytical and problem solving skills
- Proficient with Python and Matlab, limited proficiency with C/C++ and Java
- Highly motivated, with excellent interpersonal skills and team work experience

## LANGUAGES

Fluent in English, Hebrew and Russian, and proficient in German

#### **PUBLICATIONS**

- V. Mazo, I. Tamir, E. Toledano and E. Elnekave "Recurrent Fully Convolutional DenseNet for Bronchiectasis Detection in CT Imaging", Submitted to ICML (2017)
- V. Mazo, I. Tamir, E. Toledano and E. Elnekave "Ground Glass Opacity Detection Using Fully Convolutional Neural Networks", Submitted to MICCAI (2017)
- V. Mazo, E. Shimshoni, C.-W. Huang, S. Carr and H.A. Fertig "Helical quantum Hall edge modes in bilayer graphene: a realization of quantum spin-ladders", Physica Scripta, Vol. 2015, T165 (2015)
- V. Mazo, C.-W. Huang, E. Shimshoni, S. Carr and H.A. Fertig "Superfluid-insulator transition of quantum Hall domain walls in bilayer graphene", Phys. Rev. B 89, 121411 (2014)
- V. Mazo, E. Shimshoni and H.A. Fertig "Collective edge modes of a quantum Hall ferromagnet in graphene", Phys. Rev. B 86, 125404 (2012)
- V. Mazo, E. Shimshoni and H.A. Fertig "Edge states of bilayer graphene in the quantum Hall regime", Phys. Rev. B 84, 045405 (2011)
- V. Mazo and J. Sonnenschein "Non critical holographic models of the thermal phases of QCD", JHEP, Vol. 06, 091 (2008)