

OMRI DAVID ABARBANEL

PhD Candidate in Computational Chemistry

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EXPERIENCE

Teaching Assistant

University of Pittsburgh

August 2018 – Current Pittsburgh, PA

- Teaching general, organic, and physical chemistry undergraduate labs.

Research Intern

Ulijn Group - CUNY Advanced Science Research Center

May 2017 – July 2018 New York, NY

- Research project on using Second Harmonic Generation Imaging to characterize peptide self-assembly nanostructures.

IT, Social & Digital Media Director

Israel Ministry of Tourism

November 2011 – April 2016 New York, NY

- Managed the computer systems for all 5 tourism offices across the US and Canada.
- Managed the social media outlets (Facebook, Twitter, Youtube) and the website of the tourism office targeted at the North American market.

SaaS Tier 1

RSA

November 2010 – October 2011 Herzeliya, Israel

- Supported and monitored systems used for cyber security for US and European banks.

Network Administrator

Israel Defence Force

October 2007 – May 2010 Israel

- Managed the computer networks used by over 300 end-users
- Wrote SQL-like programs used by departments across Israel.
- Received the **Excellence in Service** award.

PUBLICATIONS

Journal Articles

- Abarbanel, O. D., Rozon, J., & Hutchison, G. R. (2022). Strategies for computer-aided discovery of novel open-shell polymers. *The Journal of Physical Chemistry Letters*, 13(9), 2158–2164. PMID: 35226497. doi:10.1021/acs.jpclett.2c00509
- Abarbanel, O. D., & Hutchison, G. R. (2021). Machine learning to accelerate screening for Marcus reorganization energies. *The Journal of Chemical Physics*, 155(5), 054106. doi:10.1063/5.0059682

EDUCATION

Ph.D. in Computational Chemistry

University of Pittsburgh

Aug 2018 – Current

Using Machine Learning and Genetic Algorithms for Materials Discovery.

B.Sc. in Chemistry

CUNY Hunter College

Jan 2012 – May 2016

Thomas Hunter Honors Scholar.
Graduated Magna Cum Laude.

SKILLS


Python Pytorch Tensorflow
Scikit-learn Data Visualization SQL
Bash Data Manipulation L^AT_EX
Jupyter Git Computational Chemistry


LANGUAGES

English ● ● ● ● ●

Hebrew ● ● ● ● ●

HOBBIES

 **Baking**
Sharing is caring

 **Biking**
Fun way to stay active

 **3D Printing**
Unlimited imagination

REFERENCES

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Address Line 1

Address line 2