

Michael Teti

PERSONAL/CONTACT

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ACADEMIC WORK/VOLUNTEER EXPERIENCE

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|------------------------|---|
| JAN 2017-Current | Graduate TA at Florida Atlantic University
777 Glades Road, Boca Raton, FL 33431 (781) 201-9657 |
| AUG 2016 - FEB 2017 | OPS Biological Scientist at FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION
10088 NW 53rd Street, Sunrise, FL 33351 (954) 746-1789 |
| JULY 2016-Current | CTO at VOXELRX, <i>Deep Learning Medicine</i>
Boca Raton, FL 33431 |
| JAN 2016-MAY 2016 | Physics II Supplemental Instructor at FAU CENTER FOR LEARNING AND STUDENT SUCCESS
777 Glades Road, Boca Raton, FL 33431 (561) 297-0945 |
| APRIL 2015 - JULY 2015 | Hydrogeology Intern at MIAMI-DADE COUNTY, <i>Exploratory Injection Well</i>
3071 SW 38th Ave., Miami, FL 33146 (786) 552-8122 |
| JULY 2014-APRIL 2016 | Ecology Modeling Intern at SOUTH FLORIDA WATER MANAGEMENT DISTRICT
8894 Belvedere Road, West Palm Beach, FL 33411 (561) 284 - 1179 |
| MARCH 2014-AUG 2016 | Undergraduate Researcher at FLORIDA ATLANTIC UNIVERSITY
777 Glades Road, Boca Raton, FL 33431 |
| MAY 2014-JULY 2014 | Research Volunteer at FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION
Okeechobee Field Office |

EDUCATION

- JAN 2017 - *Current* **Doctor of Philosophy in COMPLEX SYSTEMS AND BRAIN SCIENCES**
Florida Atlantic University | Boca Raton, FL
Research Area(s): Machine Learning, Theoretical Neuroscience, Computer Vision
Activities/Achievements: 1st Place Poster at FAU Graduate Research Conference 2017, Head of autonomous vehicle research at MPCR Lab
- AUG 2013 - AUG 2016 **Bachelor of Science in BIOLOGY**
Florida Atlantic University | Boca Raton, FL
Research Area(s): Machine Learning, Remote Sensing, Ecological Modeling
Activities/Achievements: Dean's List, President's Honor List (Spring 2015), GIS Certification, Co-founder of Machine Perception and Cognitive Robotics Lab, CRLA Certified Tutor, CTO of VoxelRx
- AUG 2011 - MAY 2013 **Undeclared**
Nyack College | Nyack, NY
Research Area(s): Microbiology and Psychology
Activities/Achievements: Baseball Team, Discovered and sequenced the genome of a novel bacteriophage, Dean's List 2011-2013
- MAY 2011 **Monarch High School** | Coconut Creek, FL
Activities/Achievements: Baseball Team, AP Scholar, Community Service Award

PRESENTATIONS

Teti, M., Hahn, W., and Barenholtz, E. (2017, March). Compressed Sensing With Dynamical Neural Networks. Poster presented at the Florida Atlantic University 8th Annual Graduate and Professional Research Day.

Teti, M., Hahn, W., and Barenholtz, E. (2016, April). Learning to Learn: What Machine Learning Can Tell Us About the Brain. Oral presentation given at Florida Atlantic University 6th Annual Undergraduate Research Symposium.

Winn, M., Teti, M., Sharfstein, B., Monette, D., and Markwith, S. (2016, January). Susceptibility of Applesnail Eggs to Submersion in Increasing Water Levels. Poster presented at the Florida Society of Geographers 52nd annual meeting in Daytona, Florida.

Teti, M., Sharfstein, B., and Monette, D. (2015, August). Availability of Different Vegetation Influences the Growth Rate of *Pomacea maculata*. Poster presented at the 3rd Annual Sea Level Rise and Environmental Science Symposium in Palm Beach, Florida.

Teti, M., Monette, D., Markwith, S. (2015, April). Growth Rate Estimation of *Pomacea maculata*. Poster presented at the 5th Annual Undergraduate Research Symposium at Florida Atlantic University.

AWARDED GRANTS AND FELLOWSHIPS

- SEPT. 2016 Deep Learning Automatic Image Classification and Quantification of Bird Species, **The Everglades Foundation**
- MAY 2016 - AUG 2016 Q-learning Development in Bebop Drone, **FAU Office of Undergraduate Research and Inquiry**

PROGRAMMING LANGUAGES AND SOFTWARE

Matlab	SPSS	HTML	Python
Bash	TFLearn	R	ArcGIS
Tensorflow	Jupyter	CVX	Docker
Weka	ERDAS Imagine	TeX	Linux

RESEARCH STATEMENT

- MAR 2017- **Automatic phenotyping of deep neural architectures in a real-world vehicle**
Current FAU Machine Perception and Cognitive Robotics Lab
Code at: https://github.com/mpcrlab/TF_Rover
 - Tensorflow, TFLearn, Docker, self-driving, LSTMs, CNNs, sparse modeling, computer vision, Python
- FEB 2017 **Compressed Deep Learning - Learning From Compressed Measurements**
FAU Machine Perception and Cognitive Robotics Lab
Code at: <https://github.com/MichaelTeti/CSDL>
 - Compressed Sensing, Deep Neural Networks, Dictionary Learning, Sparse Coding
- JAN 2017 **Sparse modeling for curiosity in a real-world agent**
Principal Investigator: Dr. Elan Barenholtz
FAU Machine Perception and Cognitive Robotics Lab
Code at: <https://github.com/mpcrlab/CuriosityRover>
 - Locally-competitive neural networks, sparse coding, dictionary learning, Tensorflow, Python
- DEC 2016 **A dynamical systems neural network approach to compressive sensing**
FAU Machine Perception and Cognitive Robotics Lab
Code at: https://github.com/MichaelTeti/CS_LCA
 - Locally-competitive neural networks, compressed sensing, Python, Tensorflow
- JULY 2016 **Development of deep neural networks to detect birds in remote images**
FAU Machine Perception and Cognitive Robotics Lab
Code at: <https://github.com/MichaelTeti/BirdDetectorCNN>
 - Convolutional neural networks, TensorFlow, Python
- SEP 2015 **Modeling of *P. maculata* and *P. paludosa* oviposition in Lake Okeechobee, FL**
Principal Investigators: Dr. Bruce Sharfstein and Dr. Dean Monette
South Florida Water Management District
 - Weka, SPSS

- JUNE 2015 **Deep learning sparse dictionaries for RGB image classification with locally-competitive neural networks**
Principal Investigators: Dr. Elan Barenholtz and Dr. William Hahn
FAU Machine Perception and Cognitive Robotics Lab
Code at: <https://github.com/mpcrlab/butterflies>
 - Sparse coding, locally-competitive neural networks, Matlab, dictionary learning, compressive sensing
- SEP 2014 **Growth rate estimation of *P. maculata***
Principal Investigators: Dr. Bruce Sharfstein
FAU Biogeography Lab and South Florida Water Management District
 - SPSS
- MAY 2014 **Analysis of heavy metal concentrations in native and exotic applesnail tissue**
Principal Investigators: Dr. Bruce Sharfstein
South Florida Water Management District Applied Sciences Bureau
- MAR 2014 **Geospatial modeling of *P. maculata* movement and propagation in Lake Okeechobee**
Principal Investigators: Dr. Dean Monette
FAU Biogeography Lab and FWC
 - Telemetry tracking, water quality parameter measurement, Trimble data collection, native/exotic SAV identification, ArcGIS
- JULY 2014 **Lake Worth Lagoon Restoration Monitoring and Analysis Study**
Principal Investigators: Dr. Scott Markwith
Florida Atlantic University, Environmental Resources Management, and Florida Fish and Wildlife Conservation Commission

REFERENCES

Provide upon request