

# BARUCH TABANPOUR

[blog.tabanpour.info/](http://blog.tabanpour.info/)

## WORK EXPERIENCE

*Machine Learning Engineer* – **Squarespace**

Feb 2017-Present

*Data Scientist* – **OnDeck**

July 2015-Jan 2017

- Developed loss forecasting and time-to-default models based on payment and behavioral customer data.
- Built fraud model (saving ~750k dollars per quarter) and developed unit tested model code running in production.
- Pioneered testing framework for customer communications. Maintaining email, call, letter, and reporting scripts and ETLs, impacting thousands of customers daily.
- Helped standardize and uphold data and model validation standards, while productionizing model code.
- Server admin for modeling on AWS.

*Developer* – **Columbia University**

May-Aug 2014

- Led the development of an educational Django web application to facilitate Peer Instruction.
- The app was used in a physics course offered at Columbia during Fall 2014.

## EDUCATION

**Columbia University**

May 2015

MS Applied Physics and Applied Mathematics

GPA: 3.87 / 4.00

**The City College of New York, Macaulay Honors College**

February 2014

Bachelor of Engineering (Electrical Engineering), Minor in Physics

GPA: 3.96 / 4.00, Summa Cum Laude

## TECHNICAL SKILLS

- Daily Work: Python/Flask, R, Postgres, MongoDB, Linux/Unix, AWS
- Familiar With: Theano, Vagrant, Docker, JavaScript/jQuery, HTML/CSS, MATLAB, Java

## RESEARCH PROJECTS

*Research Assistant* – **Columbia University**

June-Aug 2015

- Experimenting with deep auto-encoders for rotation invariant image representations with Prof. Tony Jebara.

*Web Developer* – **City Trek Senior Design**

Feb-Dec 2013

*Research Assistant* – **CUNY Laboratory for Nano and Micro Photonics**

June-Oct 2013

*Summer Research Fellow* – **National Institute of Standards in Technology, Boulder, CO**

May-Aug 2012

*Independent Study* – **CUNY Center for Advanced Technology**

Dec-May 2012

*Research Intern* – **NASA Goddard Institute of Space Studies, NYC**

May-Aug 2010

## PERSONAL PROJECTS

**climatechangebot** – [m.me/climatechangebot](https://m.me/climatechangebot), the first ever climate change chat bot!

**sinkhorn-knopp** - [github.com/btaba/sinkhorn\\_knopp](https://github.com/btaba/sinkhorn_knopp)

**Intro. to Reinforcement Learning** - [github.com/btaba/intro-to-rl](https://github.com/btaba/intro-to-rl)

## AFFILIATIONS & AWARDS

Co-organizer, Data Science Hackathon, March 2015 - [datasciencehackathon.info](http://datasciencehackathon.info)

Secretary and Treasurer, Eta Kappa Nu Beta Pi Chapter, Honor Society of the IEEE, 2011-2013

Morin Foundation Engineering and Science Scholar at Macaulay Honors College, 2012

Brooklyn Technical High School Scholarship, 2009-2013

Association of the Old Crows Scholarship, 2011

Major Schultz 1925 Award for Outstanding Achievement in Engineering, 2009