

# Alessandro Cosentino

data engineer

## contacts

cosenal@gmail.com  
<https://cosenal.github.io>

## nationality

Italian

## languages

English  
Italian

## education

- 2010–2015 **Ph.D.** in Computer Science University of Waterloo  
- *Fellow of the Institute for Quantum Computing*  
- *Recipient of a David R. Cheriton Graduate Scholarship*
- 2006–2009 **M.Math** in Computer Science University of Pisa  
Final score: 110/110 *cum laude*
- 2003–2006 **B.Math** in Computer Science University of Pisa  
Final score: 110/110 *cum laude*

## experience

- Jan '16–now **Data Engineer** Bending Spoons  
Developing an analytical tool for estimating financial data of the mobile apps market through fetching and processing of terabytes of App Store data.
- 2010–2013 **Teaching Assistant** University of Waterloo  
Courses: Theory of Quantum Information (graduate), Data Structures and Data Management, Algorithms, Introduction to Computer Science.
- Summer '12 **Google Summer of Code Student Developer** KDE  
Created the News app, a feed reader for the ownCloud platform.
- Winter '12 **UNIX Consultant** Math Faculty Computing Facility, UWaterloo  
Assisted students, faculty and staff with UNIX related problems.

## publications

Limitations on Separable Measurements by Convex Optimization

IEEE Transactions on Information Theory. 2015

Small sets of locally indistinguishable orthogonal maximally entangled states

Quantum Information & Computation. 2014

Positive-partial-transpose-indistinguishable states via semidefinite programming

Phys. Rev. A. 2013

(This is a selected list of journal publications. For a complete list, see [Google Scholar](#)).

## skills

**Programming** *Main:* Python (3+ yr), MATLAB/Octave (3 yr); *Familiar with:* PHP, Javascript;  
*Prior experience:* OCaml, Go, C++;

**Data Engineering** AirFlow, Spark, Redis, PostgreSQL, BigQuery, Re:dash;

**Data Analysis** R, pandas, scikit-learn, Excel;

**Web** Flask, HTML5, AngularJS framework, CSS;

**Other** Heroku toolbox, Git, Bash, RSS and Atom standards,  $\text{\LaTeX}$ .