

# Peter Goldsborough

[peter@goldsborough.me](mailto:peter@goldsborough.me) • [linkedin.com/in/petergoldsborough](https://www.linkedin.com/in/petergoldsborough) • [goldsborough.me](http://goldsborough.me)

## WORK EXPERIENCE

- **Institute of Networked and Embedded Systems**, Klagenfurt University, Austria 07/2014  
Summer Intern
  - Ported Non-Intrusive-Appliance-Monitoring (NIALM) algorithms from MATLAB to Python, C++ and SQL.
  - Visualized real-time appliance energy data in a Heroku cloud app using Python, Flask, PostgreSQL, HTML, CSS and Javascript; still live at [nilm.herokuapp.com](http://nilm.herokuapp.com).
- **Institute of Networked and Embedded Systems**, Klagenfurt University, Austria 10/2014 — Present  
Research Intern
  - Applying machine-learning and data-science techniques to make NIALM algorithms unsupervised.
  - Invented custom  $O(N \log N)$  clustering algorithm to replace existing  $O(N^2)$  solution.
  - Wrote 8363 lines of C++ code so far (working 5-10 hours/week)
- **Google**, London, United Kingdom 08/2016 — 11/2016  
Software Engineering Intern
  - Will be working on visualization software for Google's advertisement technologies.
- **Bloomberg**, London, United Kingdom 11/2016 — 04/2017  
Software Engineering Intern
  - Currently deciding on project.

## SKILLS

- Very Good: C++, Python, Java
- Good: Qt,  $\text{\LaTeX}$ <sup>1</sup>, HTML, CSS/SASS, SQL
- Intermediate: Arduino, AVR C, Git, Assembly
- Prior Experience: JavaScript, Flask, Heroku, VHDL
- (Operating) Systems: **OS X**, **Linux**, Windows, Arduino, ATMEL  $\mu$ -controllers

## PROJECTS

- Various projects found at [github.com/goldsborough](https://github.com/goldsborough); snippets and scripts at [gist.github.com/goldsborough](https://gist.github.com/goldsborough)
- Personal blog & website, old at [thecodeinn.blogspot.com](http://thecodeinn.blogspot.com), new at [goldsborough.me](http://goldsborough.me).
- In-progress open-source C++ & Qt-based music synthesizer *Anthem* (26,575 lines of code so far) alongside 120-page [high-school diploma thesis](#) on the math, digital signal processing and engineering behind it.
- Four-part freelance tutorial project *Building a Text Editor with PyQt* published on Binpress, currently with more than 60 stars [on GitHub](#). Mentioned in PythonWeekly (issue 155) and PyCoder's Weekly (issues 131 and 132) newsletters.

## EDUCATION

- **BG | BRG St. Martin High School**, Villach, Austria 09/2011 — 06/2015
  - Graduated as valedictorian with straight A's across all subjects and my thesis.
  - School president 2013/2014; long-time involvement in student representation.
- **Technical University of Munich (TUM)**, Germany 10/2015 — Present  
B.Sc. in Computer Science
  - Admitted with a score of 100/100.
  - Member of TUM Investment Club, working on Algorithmic Trading.

<sup>1</sup>See CV. Beware: recursion.