

adrian wan

algorithms design engineer @ Nest

contact

✉ adrianwan2@gmail.com
☎ (610)-505-5087

🌐 awan1.github.io
in [Inked.in/awan](#)
🔗 [github.com/awan1](#)

languages

trilingual English,
Cantonese, Mandarin
fluent Japanese
beginner French, ASL

programming

♥ Python
(pandas, SciPy)
MATLAB
♥ Git
Atlassian Stack
(Stash, JIRA)

about

I develop **extensible and flexible analysis tools** to produce actionable, robust, **data-driven insights**.

education

2011–2015 **B.A. Physics & Computer Science** Swarthmore College, Swarthmore PA
Cum. GPA: 3.9 · *Phi Beta Kappa*
Physics: Statistical Physics · Quantum Theory · Analytical Dynamics ·
Electrodynamics · Thermodynamics & Stat. Mechanics
CS: Intro. Programming Languages · Algorithms · Cloud Systems & Data
Networks · Databases · Operating Systems · A.I. · Bioinformatics

experience

2015– **Nest** **Algorithm Design Engineer**
· **Re-engineered** a MATLAB script-based, labor-intensive process for device sensor modeling into a streamlined, **extensible Python library**:
– Abstracted **mathematical models** for rapid prototyping and exploration;
– Used across existing and future hardware to unlock product features;
– **Planned and executed** as a one-month project;
– Used to address customer-facing issues.

2014 **Nest** Algorithm Design & Data Science Intern
· Spearheaded Python prototyping of **data-driven user product**:
– Developed, implemented, and evaluated models of on-device sensor data using **Pandas**;
– Employed **test-driven development** to publish an extensible modeling package, used within team to prototype related features;
– **Balanced** development with research-style exploration of results and data.

2013–2014 **Swarthmore Spheromak Experiment (SSX)** Research Assistant
· Received the **Vandervelde-Cheung Scholarship** for summer research.
· Developed Python (SciPy) scripts to analyze plasma wind-tunnel data.
· Received the **Outstanding Undergraduate Poster Award** for poster presentation at the APS Division of Plasma Physics 2013 Meeting.
· Coauthored papers published in *Physical Review Letters* and in *Plasma Physics and Controlled Fusion*.

for more

Publications and more experiences are on my personal website and on LinkedIn.