## Nicholas Werner

Long Beach CA - Willing to Relocate

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## **EDUCATION**

California State University, Long Beach

Long Beach, CA

Bachelor of Science, Physics

Dec 2017

Minors in Computer Science and Applied Math

Maxwell, AL

Community College of the Air Force

July 2013

Associate of Science, Scientific Analysis Technology

EXPERIENCE

Long Beach, CA CSU Long Beach

Research Assistant - Computational Physics

Jun 2017 - Aug 2017

o Studied quantum mechanical models of electron energy dynamics in multilayer graphene

o Refactored Python/FORTRAN project (1500 LOC) into object-oriented, multithreaded Python

CSU Long Beach Long Beach, CA

Teaching Assistant - Physics

Sept 2016 - Apr 2017

o Provided feedback on 200+ freshman physics student papers – improved educational effectiveness

**US Air Force** Cocoa Beach, FL

Geophysical Data Engineer

Dec 2013 - Mar 2015

o Slashed inefficiencies in Windows/Linux data workflow to reduce processing time by 60%

- o Created custom data workflow visualization software with Python to facilitate rapid analysis
- o Developed Java program to convert geophysical calculation results into XML format
- o Analyzed 600+ events from new data source confirmed viability of further development Wrote training materials and standard operating procedures for brand-new work center
- o Drafted 18 technical reports to clearly communicate analysis findings to senior leadership

US Air Force Cocoa Beach, FL

Geophysical Data Analyst

Mar 2011 - Dec 2013

- o Analyzed 7.5k seismic events with 90% accuracy highest data quality in 30-person shop
- o Earned shift leader position in 1 year 6 months ahead of standard training schedule
- o Supervised shifts of up to 6 Airmen held daily responsibility for data quality and timeliness
- o Cross-trained into part-time Satellite Data Analysis, alleviating chronic personnel shortage

## SKILLS

- o Previously held Top Secret/SCI security clearance (active from 2011 to 2015)
- o Python data science (Pandas), data visualization (Matplotlib), scientific computing (NumPy)
- o Java object-oriented design, MVC design, GUI software design, XML manipulation
- o Linux/Bash command line, scripting, file handling, automation, data flow
- o Technical writing drafting standard operating procedures, scientific analysis reports

## ACHIEVEMENTS

- Air Force Commendation Medal
- o Top Graduate Air Force Tech School, San Angelo TX
- o Student Leader (Red Rope) Air Force Tech School, San Angelo TX
- o Chapel Student Leader (White Rope) Air Force Tech School, San Angelo TX