

# Nicholas Werner

Long Beach CA

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## EDUCATION

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### California State University, Long Beach

*Bachelor of Science, Physics*

Minors in Computer Science and Applied Math

Long Beach, CA

Dec 2017

### Community College of the Air Force

*Associate of Science, Scientific Analysis Technology*

Maxwell, AL

July 2013

## EXPERIENCE

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### CSU Long Beach

*Research Assistant – Computational Physics*

Long Beach, CA

Jun 2017 – Aug 2017

- Studied quantum mechanical models of electron energy dynamics in multilayer graphene
- Refactored Python/FORTRAN project (1500 LOC) into object-oriented, multithreaded Python

### CSU Long Beach

*Teaching Assistant - Physics*

Long Beach, CA

Sept 2016 – Apr 2017

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

### US Air Force

*Geophysical Data Engineer*

Cocoa Beach, FL

Dec 2013 – Mar 2015

- Slashed inefficiencies in Windows/Linux data workflow to reduce processing time by 60%
- Created custom data workflow visualization software with Python to facilitate rapid analysis
- Developed Java program to convert geophysical calculation results into XML format
- Analyzed 600+ events from new data source – confirmed viability of further development
- Wrote training materials and standard operating procedures for brand-new work center
- Drafted 18 technical reports to clearly communicate analysis findings to senior leadership

### US Air Force

*Geophysical Data Analyst*

Cocoa Beach, FL

Mar 2011 – Dec 2013

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

## SKILLS

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

## ACHIEVEMENTS

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