Nicholas A. Werner

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Air Force Veteran & Junior Software Engineer with 4 Years of Experience

Education

Bachelor of Science, Physics   **Dec 2017**
California State University, Long Beach
Minor in Computer Science/Minor in Applied Math
Selected coursework:

- Experimental Physics
- Data Structures & Algorithms
- Numerical Analysis w/ MATLAB
- Quantum Mechanics
- Algorithmic Game Theory
- Object-oriented Java
- Electronics for Physicists
- Artificial Intelligence
- Data Science w/ Python

Associate of Applied Science, Scientific Analysis Technology   **July 2013**
Community College of the Air Force

Skills

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

Experience

Research Assistant – CSULB Dept. of Physics – Long Beach, CA   **Jun 2017-Aug 2017**
- Studied quantum mechanical models of electron transport dynamics in graphene
- Refactored existing Python/FORTRAN codebase into object-oriented, multithreaded Python

Teaching Assistant – CSULB Dept. of Physics – Long Beach, CA   **Sep 2016-Apr 2017**
- Provided feedback on 200+ physics student papers – improved educational effectiveness

Seismic Data Engineer - US Air Force – Patrick AFB, FL   **Dec 2013-Mar 2015**
- Slashed inefficiencies in Windows/Linux data workflow to reduce processing time by 60%
- Created 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 communicate analysis findings to senior leadership

Seismic Data Analyst - US Air Force – Patrick AFB, FL   **Mar 2011-Dec 2013**
- Analyzed 7.5k seismic events with 90% accuracy – highest data quality in 30-person shop
- Attained management 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

Awards & Activities

- Webmaster – CSULB Society of Physics Students
- Air Force Commendation Medal – Patrick AFB, FL
- Top Graduate – Air Force Technical Training, San Angelo TX
- Airman Leader (Red Rope) – Air Force Technical Training, San Angelo TX
- Chapel Student Leader (White Rope) – Air Force Technical Training, San Angelo TX