Brayden Bekker

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CAREER OBJECTIVE

- Seeking opportunities to apply machine learning and problem solving skills to real world problems.

EDUCATION

- Apr 2016 – Present BS Physics Brigham Young University

ADVANCED TECHNICAL SKILLS & KNOWLEDGE AREAS

- Programming Language –**Python,Julia,Bash,C++**
- **VASP**
- **Slurm**

Employment

- 2017-PresentResearch Assistant Physics Department, BYU.
  - Using Machine Learning to discover new Superalloys with the materials simulation group (MSG) at BYU
  - Comparing Machine Learning descriptors of local atomic environments with MSG
- PresentGrader for Modern Physics
- 2018Junior Engineer at TRACY
  - Developed python code to automate defects calculations in atomic structures in the Vienna Ab Initio Package (VASP) for Density Functional Theory (DFT) calculations.
- 2016Research Assistant Geography Department.
  - Studied the impact of chemical absorption of different tree species on re purposing closed chemical plant land.

QUALIFICATIONS

Nyshadham, C., Rupp, M., Bekker, B., Shapeev, A. V., Mueller, T., Rosenbrock, C. W., ... Hart, G. L. (2019). Machine-learned multi-system surrogate models for materials prediction. npj Computational Materials, 5(1), 1-6.

Completed the computational materials physics two-week "Hands on DFT" workshop in Barcelona, Spain

Bekker, B., Oliver, H., Nyshadham, C., Shapeev, A., Hart, G. (2019). Exploring Materials Space with Machine Learning. In APS Meeting Abstracts.

Relevant Courses

- Into to Mathematical Physics, Solid State Physics, Linear Algebra, Ordinary Differential Equations, Calculus 1-3, Thermal Physics