resume\_80@gmail.com  
(835) 739 9163  
Michael Fink  
Data Scientist/TPM - Smart Resource Labs  
Colchester VT - Email me on Indeed: indeed.com/r/Michael-Fink/de1318cf5e7cc74c  
I am a data scientist with an extensive history in math chemistry and physics. I have experience with R iPython Mathematica MATLAB SQL MongoDB and Javascript. My last three annual reviews cited my teamwork attitude and accountability as being particularly strong. I aspire to become an expert data scientist fluent in Python and R.  
WORK EXPERIENCE  
Data Scientist/TPM  
Smart Resource Labs - Burlington VT - October 2015 to Present  
 Solely responsible for data analysis for a 1 MW solar farm in Vergennes VT.  
 Wrote Python scripts to analyze and create visualizations to identify and predict inverter faults degradation snow losses performance relative to model subarray peer-to-peer performance and much more.  
 Wrote Python scripts to analyze data and provide a 10 MW solar plant with a calculation awarding  
them a Make-Whole payment from a lengthy legal document.  
 Responsible for delivery of data products and energy-measurement packages.  
Process Engineer  
Chroma Technology - Bellows Falls VT - April 2013 to October 2014  
Responsible for discovering initiating improving verifying and standardizing manufacturing processes in Chroma's reactive sputtering department.  
 Wrote Mathematica program for visualization of gas composition vs. sputter rate gas flow rates vs. pressure and several other metrics.  
 Extensive recording modification and use of Excel macros and SQL views for analysis of process metrics especially arcing gas pressures gas composition vacuum statistics and resulting cosmetic quality.  
 Analyzed hundreds of anneals with JMP to find a characteristic equation to find correct anneal temperature to induce needed spectral shift of product based on the product's chemical composition.  
Contract Chemist  
Self-employed Antarctica/Vermont - August 2012 to March 2013  
 Programmed electronic models of organic semiconductor photovoltaics for comparison to experimental results.  
 Conducted calibrations of spectrophotometers under adverse conditions on the Antarctic Ocean.  
Thin Film Scientist  
Omega Optical - Brattleboro VT - July 2008 to July 2012  
Modeled built and tested tens of organic photovoltaic designs culminating in a near-record  
breaking organic PV cell.  
 Developed a Mathematica program that determines the risk of late delivery based on yield of process steps and historical precedent with the requested product.  
 Authored white papers on polarization anti-reflective technology and Shack-Hartmann wavefront  
   
detection.  
 Singlehandedly developed and wrote 12 educational laboratory exercises emphasizing  
connections between photonics and biology chemistry and other fields in physics resulting in a  
new product.  
 Scored 53/55 and 54/55 in 2010 and 2011 annual employee reviews (no other reviews given during my tenure at Omega).  
Physics Teacher  
Chemistry - Saint Johnsbury VT - August 2006 to June 2008  
Taught ~50 students per semester in subjects of chemistry and physics emphasizing practical  
uses of science.  
 Developed seven student directed labs on topics including identification of unknowns separating of mixtures calorimetry and stoichiometry.  
 Wrote Mathematica demonstrations on physics topics including wave interference Fourier  
analysis diffusion and random walks.  
EDUCATION  
Doctorate in Chemistry  
University of Oregon - Eugene OR March 2006  
Master of Science in Chemistry  
University of Oregon - Eugene OR June 2001  
Bachelor of Science in Chemistry  
Bates College - Lewiston ME June 1999  
Mechanics  
Solid-State Physics