

Christian Basile

Philadelphia, PA - Email me on Indeed: [indeed.com/r/Christian-Basile/d2775ed06ee0db32](https://www.indeed.com/r/Christian-Basile/d2775ed06ee0db32)

Demonstrated experience gathering experimental data, analyzing using computer models and developing a process understanding • Competent in Linux, Mac, Windows, Excel, Python, R, Git/Github, Mathematica, MATLAB, Simulink • Experienced in Constrained Based & Rule Based Modeling, Computational Biology, Statistical Analysis, Numerical Methods • Proficient in Mathematical Modeling, Model Validation, Parameter Estimation • Knowledge in Machine Learning, Optimization Methods, Biomaterials and Molecular Pathology • Interested in practical assignments in R&D to bring real solutions and innovation to a laboratory environment. • Expertise using Chemical Analytical Techniques including IR, GC • Bilingual in Spanish-English- using multiple languages in laboratory, research and educational contexts

WORK EXPERIENCE

Regional System Engineer/Control Engineer

Metso - Philadelphia, PA - November 2013 to Present

Responsibilities

- Developed and studied highly complex fossil fuel control logic and graphics using Metso software to assist in operations project engineering activities.
- Performed installation, Commissioning, Start-up of digital control systems as well as computer networks
- Developed experience with several software products PI SERVER, Smart Signal(Statistical Failure Power Plant analysis) Microsoft Access, Excel/VBA
- Coordinates the activities of Metso Automation and customer personnel on projects as well as makes reports on system successes and deficiencies.

Accomplishments

Always keeping clients expectations

Part of projects of high impact to the company

Skills Used

Chemical Engineering, Process Control, Modeling, People's skills, Software Products: Excel/VBA

Research Associate Scientist

Columbia University - New York, NY - March 2013 to August 2013

- Implemented and tested a model to study how substrates (i.e. glucose) and oxygen intake by human heart impacts the cell energy generation process.
- Studied optimization algorithms in combination with model to gain insight into the results.

RESEARCH COLLABORATOR FOR IBM RESEARCH

SELF EMPLOYED - New York, NY - March 2013 to August 2013

- Studied a highly complex "Whole Cell" mathematical model in combination with other codes to determine effect that parameters have on model being used by IBM, as well proposed user friendly instructions of how to use the model.
- Shared results with the IBM co-workers and provided valuable feedback on a highly complex parameter estimation design

GRADUATE STUDENT

UNIVERSITY OF PITTSBURGH - Pittsburgh, PA - September 2010 to December 2012

- Developed a highly complex pharmacokinetic model to study the interaction of Gemcitabine and its metabolites inside the cells
- Validated model above using published data and optimization/statistics algorithms.

Teaching Assistant

UNIVERSITY OF PITTSBURGH - Pittsburgh, PA - January 2011 to May 2011

Graded papers, projects and exams

Provided guidance to students to improve engineering computer codes.

Teaching Assistant

UNIVERSITY OF ROCHESTER - Rochester, NY - January 2008 to December 2008

Lectured on general chemistry and Calculus subjects

Graded homework, projects and exams

R&D ENGINEER INTERNSHIP

URBAN GREEN ENERGY - New York, NY - February 2013

Tested two computer packages - HOMER Energy and Hybrid 2 to evaluate the efficiency of electrical energy generating systems being considered by the Urban Green Energy Company.

Developed two separate programs as predictive and forecasting tools to study various electrical energy generation systems including solar and wind sources.

Led team effort on some of the assigned tasks.

EDUCATION

Master of Science in Chemical Engineering

University of Pittsburgh - Pittsburgh, PA

2010 to 2012

Bachelors of Science in Chemical Engineering and Minor: Economics

University of Rochester - Rochester, NY

2006 to 2010

SKILLS

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