Tucker Langseth

2272 Hershey Avenue| East Petersburg, PA 17520 | (717) 342-1828
tuckermmlangseth@gmail.com

Why Hire Me?

Creative engineer with 5 years of experience in industry and research, a B.S. in Chemical Engineering, and a strong background in system design, error analysis, and algorithmic data solutions. A critical thinker able to autonomously identify and fix problems using creative and efficient solutions. A fast learner, able to use past situations to find solutions in future problems. High output and quality of work, while maintaining a strong, cooperative working relationship with my peers.

EDUCATION

The Pennsylvania State University – *University Park, PA (*May 2015)
B.S. Chemical Engineering

Indie Game Development/Programming (2013-Current)

- Proficient in C#, Python, Java, and HTML high-level languages
- Use of programming tools: github, gitbash, Visual Studio, Android Studio, Unity
- Created and completed design and implementation of multiple game projects
- Projects: **https://theashyggdrasil.github.io/**

PROFESSIONAL EXPERIENCE

System Validation Engineer at Eurofins Lancaster Laboratories – *Lancaster, PA* *(*2016-Current)

Purchase, validate, and maintain Class I, II, and III instruments for bio/pharmaceutical applications while maintaining QA/QC standards

- Design algorithmic based data collection on instrument software to meet company's specified needs (DataGaurd, VisionCats, Autopol)
- Validate system based on 21CFR11 compliance and other FDA regulations: Ion Chromatography (IC), Polarimeter, Viscometer, TOC
- Technical expert for major Class I systems: IC, TOC, UV-VIS, XRD
- Designed cold-trap unit to prevent vacuum pump contamination
- Create VBA excel formulas and macros for instrument software

Chemist at Eurofins Lancaster Laboratories – *Lancaster, PA* *(*2015-2016)

Primary role is to assess raw materials for bio/pharmaceutical applications while maintaining QA/QC standards

- Lead Analyst with Polarimeters, Differential Scanning Calorimeters (DSC), pH electrodes, Thermogravimetric Analyzers (TGA), XRD, Karl Fischer units and UV-VIS
- Designed time management improvement of weekly testing schedule
- Spearheaded implementation of new electronic data capturing
- Trained and assisted peers on DSC, TGA, XRD, and UV-VIS operation and function
- Executed maintenance and qualification of instruments
- Leadership role in the lab

ARPA-e Electrofuels Research Assistant – *University Park, PA* *(*2012-2015)

Focused on process control strategies for a membrane protein expression (MPE) system, and characterized bacterial growth stoichiometrically and subsequently prototyped a system for pH control

- Refined proficiency in molecular biology techniques e.g. cloning**,** PCR, gel electrophoresis, sequencing
- Increased volumetric productivity of protein production by an order of magnitude using pH control
- Created a control system of pH in a batch, stirred tank, photo bio-reactor

SKILLS

- *Software*: C++, Aspen-Hysis, C#, Unity, Java, SQL, VBA, Python, Mathematica, MatLab, git, cmd
- *Strengths*: efficiency, critical thinking, outgoing, quick learner, creativity
- Unity 2D game development, Algorithmic data solutions

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ACTIVITIES

Div. III NCAA Soccer – Penn State Berks	2010-2011
PSU THON committee	2010-2014
Lancaster North Museum of Nature and Science Volunteer	2016-current

HONORS, AWARDS AND SCHOLARSHIPS

Wyomissing Polytechnic Institute of Engineering Scholarship
NCAA Scholar Athlete Award, Two years
Chemical Engineering Undergraduate Research Scholarship