Tucker Langseth

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

Why?

Highly creative, problem solving game developer and chemical engineer with 5 years of experience in the pharmaceutical industry, 3 years of indie game development experience, and a B.S. in Chemical Engineering. A diverse background in system design, error analysis, and algorithmic data solutions. An introspective thinker able to autonomously identify and fix problems using thought out solutions. Able to understand concepts quickly, and use past situations to find solutions. High output of work, while maintaining a healthy symbiotic relationship with my co-workers.

EDUCATION

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

Indie Game Development (2015-Current)

- Self-taught aspects of game development and game design
  - *Game Engine Architecture* by Jason Gregory
  - *Game Coding Complete* by Mike McShaffry and David Graham
  - *Design Patterns* by the GoF
  - *Effective C++* by Scott Meyers
- Firm understanding of OOP concepts, Unity 2D/3D, Unreal 3D, Debugging (for the most part) and Data Management
- Outlined, managed, programmed and QA tested multiple Indie Game Projects
- Portfolio: ***https://theashyggdrasil.github.io/***

PROFESSIONAL EXPERIENCE

System 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

Chemical Engineer 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
- 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

Where Do I Excel?

- OOP principles, Idea management, Creative Thinking, VBA/Excel, Mathematica, MatLab
- Outlining ideas, taking in criticism and advice, then performing said ideas

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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
Lancaster County Science Fair Lead Judge	2017-current

HONORS, AWARDS AND SCHOLARSHIPS

Wyomissing Polytechnic Institute of Engineering Scholarship NCAA
Scholar Athlete Award, 2010-2011
Chemical Engineering Undergraduate Research Scholarship