Tucker Langseth

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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 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
- Programming tools: github, gitbash, Visual Studio, Android Studio, Unity, cmd
- Created and completed design and implementation of multiple game projects
- Creating Android app to create edited images using Java and ADK
- Projects: https://theashyggdrasil.github.io/ (created portfolio using HTML/CSS/JS template)

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
- Use of JIRA to communicate project timelines

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 Berks2010-2011PSU THON committee2010-2014Lancaster North Museum of Nature and Science Volunteer2016-current

HONORS, AWARDS AND SCHOLARSHIPS

Wyomissing Polytechnic Institute of Engineering Scholarship NCAA Scholar Athlete Award, Two years Chemical Engineering Undergraduate Research Scholarship Lead Judge at North Museum Science and Engineering Fair