Cameron Hudson

Summary

- Employs best practices of object-oriented design, including design patterns and SOLID principles.
- Applies agile software development practices and test-driven development.
- Experience with full-stack web development, Docker containers, and cloud deployment on Kubernetes.

Academic Projects

Design Patterns Web Application

Carnegie Mellon University

Software Architecture and Design

Jan 2019 - May 2019

- Realized the 23 canonical design patterns by drawing class diagrams and implementing them in Java.
- Presented class diagrams and code output in user-friendly Java Spring MVC web application.

Emergency Social Network

Carnegie Mellon University

Fundamentals of Software Engineering

Sep 2018 - Dec 2018

- Addressed antiquated disaster response by producing Angular 7 mobile web app for citizens in distress.
- Enabled fulfillment of basic needs by building Craigslist-style listing system for shelter, water, food, etc.
- Employed object-oriented design principles and test-driven development to achieve high code quality.

Personal Projects

Bayesian Trading Add-On for Elder Scrolls Online

Feb 2018 - Mar 2018

- Developed add-on in Lua to eliminate inventory management tedium by automating loot liquidation.
- Using game data for Bayesian prior, computed the maximum a posteriori value of each item.
- Rocketed to #3 in terms of trade revenue within guild, increased time for gameplay with wife.

Day Trading Web App for Eve Online

Jan 2018 - Mar 2018

- Constructed web app from Laravel and MySQL to identify lucrative commodity trade opportunities.
- Authenticated with game API, processed market data, and multiplied wealth by 7x over 3 months.

Professional Experience

Engineer 2 Princeton, NJ

Axens (Petroleum Desulfurization)

Jul 2016 - May 2017

• Automated pressure containment calculations with Visual Basic, improving safety and saving manhours.

Engineer 2 Hampton Township, NJ

Amec Foster Wheeler (Engineering Contractor)

Jan 2013 - Mar 2016

• Leveraged Visual Basic to assemble and format 120-sheet Excel file, permitting on-time delivery to client.

Education

MS, Software Engineering, 3.45 GPA Mountain View, CA

Carnegie Mellon University, Silicon Valley Aug 2018 - Dec 2019

BS, Chemical & Biomolecular Engineering, 3.39 GPA

Baltimore, MD

Johns Hopkins University Sep 2008 - May 2012

Skills and Interests

Languages Frameworks Databases

Java, C, JavaScript Angular 7, Spring MVC, Laravel MySQL, MongoDB

Certifications

NCEES Engineer-In-Training

Nov 2017 - present

ASQ Six Sigma Green Belt

Oct 2017 - present