William E. Kappler II

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Employment

Software Engineer, Bennett Aerospace (ARA Contract)   2016-2021

Developed and maintained software for use by the US Military to simulate weapon effects on targets using physical models and data from a variety of sources. Work incorporated system design, UI development, data processing, cloud services, and physical modeling within an Agile/Scrum development process.

Contractor, John Wiley & Sons   2014-2016

Created and reviewed material for the digital component of the Elementary Principles of Chemical Processes textbook. Assisted development of the online UI.

Education

North Carolina State University   2012-2015

Bachelor of Science in Chemical Engineering (Summa Cum Laude)   GPA: 3.831

Wake Technical Community College   2010-2011

Associate of Science (Honors)   GPA: 3.815

Skills and Competencies

Software Development

- C, C++, and Python programming
- API design and documentation
- 3D/GPU programming (GLSL)
- GUI development
- Data model and data system design
- Software optimization
- JSON and XML data encoding
- HTML and CSS
- Django website development

Engineering and Chemistry

- Fluid dynamics
- Thermodynamics
- Organic synthesis
- Chemical hazards and prevention

General

- Windows and Linux
- Microsoft Office and LibreOffice
- Hard surface 3D modeling