

SUMMARY	Computer science professional of 2 years. I have a passion for expanding my expertise in DevOps and software design and architecture. I strive to improve the products and the teams on which I work.	
WORK EXPERIENCE	<i>Sandia National Labs: Computer Scientist R&D</i>	June 2017 - Present
	Worked as a full stack developer on a redesign of an inventory tracking web application. Primary languages were Java, Typescript, and PL/SQL. Primary frameworks were Spring Boot and Angular.	
	<ul style="list-style-type: none"> Redesigned the legacy Oracle database schema to support complete history of inventory. Led the migration effort. Prototyped a new authentication scheme which branched into an independent project seeking adoption by the department. Frequently interacted with customers and management to present new solutions and refine business practices. 	
	<i>CSX Corporation: Intern</i>	Jan. 2013 - May 2013
	Designed SQL queries to collect GPS train data from CSX servers for use in self-implemented clustering algorithms to estimate customer service times on a rail network.	
ACADEMIC PROJECTS (see tabaker.com)	<i>DR-Planner</i>	Doctoral research, Independent (C++)
	Designed a GUI and the underlying algorithms to quickly find realizations of rigid, 2D bar-joint graphs. Independently coded and architected.	
	<ul style="list-style-type: none"> Implemented self-created algorithms, suitable for industry CAD software. Lead author on scientific paper, published in CAGD. 	
	<i>EASAL</i>	Doctoral research, ~10 contributors (C++)
	Contributed to software that explores the assembly landscape of molecules (and other physical structures.)	
	<ul style="list-style-type: none"> Led the restructuring and refactorization of this project; this allowed for accelerated development with undergraduate students. Contributed to the user guide and feature summary, to be published in TOMS. 	
PERSONAL PROJECTS (see tabaker.com)	<i>Game Engine</i>	Independent (C++, Lua)
	Features: sophisticated software architecture patterns, multi-threading, and a deep understanding of the OpenGL 4 pipeline.	
	<i>LolCupid</i>	2 contributors (Ruby, SQL, Javascript, HTML/CSS)
	Features: dynamic website powered by Ruby on Rails, attractive UI, large PostgreSQL database (~90k records), daily tasks for updating database via calls to Riot Games API, and more.	
EDUCATION	<i>M.S. in Computer Science</i>	May 2017
	University of Florida, GPA: 3.96	
	Presented at conferences and authored paper in the field of combinatorial geometry. Taught undergraduate classes.	
	<i>B.S. in Nuclear Engineering</i>	May 2013
	University of Florida, GPA: 3.99	
	Minors: Computer Science, Astronomy, Pre-med track	
SKILLS	Web design, software architecture, authentication and authorization, machine learning, computer graphics, theory of computing.	
	<i>Languages (Strong):</i> Java, Typescript, PL/SQL.	
	<i>Languages (Moderate):</i> C/C++, Python.	