

Joshua Shaffer

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Education

BS in Computer Science from Texas A&M University GPA 2.921, expected graduation May 2019	Morton Ranch High School, Katy Texas GPA 4.125, graduated 52 nd of 702, June 2014
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Experience

2017–Present	Desktop Software Developer <i>Texas A&M University</i> Designed an OS simulation and a visualizer to assist in teaching Unix programming concepts.
2016	Volunteer IT Helper <i>Lucy Hill Patterson Memorial Library</i> Helped non-technical persons to use and understand digital technologies.
2014	Team captain <i>FIRST Robotics Competition - Team 2882</i> Served as leader. Mentored new members.
2013-2014	Robotics programmer <i>FIRST Robotics Competition - Team 2882</i> Assembled and programmed cRIO for both autonomous and remote control operation.

Technical Skill Highlights

Haskell	I have made a CPU monitor, an assembler, a tic-tak-toe game, a lambda calculus solver, and a parser/interpreter. This is my favorite language.
C & C++	Writing an OS simulation and visualizer, programmed an Arduino for my CPU Monitor, wrote a maze generator, a security wrapper, and used for most of my college course work.
L ^A T _E X	I wrote this résumé, reports and memos for work, and mathematical proofs for homework.
Java	Made many small games and desktop apps. Used in FIRST Robotics Competition and two years of high school classes.
C# & Unity3d	Experimented with game programming and procedural generation. Made a music visualizer.
Unix style work-flow	I use Linux as my primary OS. For most projects I use Git and an automated build system such as Make or Cabal. I also use pretty-printers and linters such as clang-format to help enforce code quality. I tend to stay away from monolithic IDE's as they are not as flexible.
Et Cetra	I am also familiar with many other languages and tools such as: Wordpress, JavaScript, HTML, CSS, Python, Bash, Lua, LabVIEW, MATLAB, Arduino

Focus and Passions

Functional Programming	I was introduced to Haskell in the fall of 2016. Since then I have continued studying and have become very interested in the functional paradigm. I am most intrigued by it's benefits to code correctness, ease of maintenance, and ease of parallelization.
Robotics & IoT	I am very interested in how computing can be applied in the physical world and solve tangible problems. I also have a lifelong passion for the physical sciences and it's fun to mix the two.
Teaching	I enjoy sharing these passions with others and I am often told that I have a natural talent for explaining things. I want to pursue this at some point in my career.

Achievements

Won first place at TAMUHack for our stock trading robot. - October 2, 2016	Contributed to open source by adding config options to Fusuma. - April 22, 2017	Vice President of W5AC, the Texas A&M Amateur Radio Club. - since February 9, 2017
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