



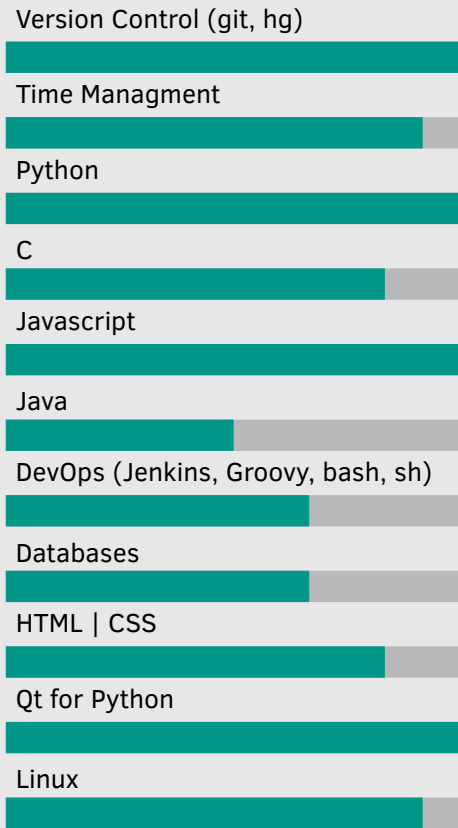
Justin Engel

Senior Software Engineer

Also known as the Python help desk

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-  734-223-6934
-  <https://justengel.com>
-  <https://github.com/justengel>

Skills



Other: Iridium 9602, Pelco-D, TCP, UDP Multicast, Serial Port (UART), Threading, Multiprocessing,

PySide2, Numpy, Numpy C API, Matplotlib, Tox, pytest, Django, Sphinx, Markdown, Leaflet,

Nginx, Inkscape, Pycharm, LaTeX, Qt Creator, Inno Setup (Pascal), Visual Studio Code, Kanban, Scrum, Agile

Experience

2013 - Pres SeaLandAire Technologies Inc. Jackson, MI
Senior Software Engineer - Software Group Lead

- Worked closely with team members to diagnose and solve problems
- Estimated and managed project timelines
- Developed sharable libraries and frameworks
- Turned rough ideas into well-structured applications
- Wrote clean reusable code with a focus on structure and flexibility
- Modified large legacy code bases while keeping existing functionality
- Forked and contributed to widely used 3rd party libraries
- Learned various engineering skills through books and online research
- Assisted Engineers from other disciplines to optimize their workflow
- Profiled software to improve memory efficiency and performance
- Validated products with custom test software
- Created realtime data analysis software used in field tests
- Deployed a Jenkins build server and an internal pypi server

2011 - 2013 Air Force Institute of Technology WPAFB, OH
Undergraduate Research Assistant

- Developed Internationally deployed laser simulations in Matlab
- Proposed new software design implementation
- Converted the entire codebase into an organized Object-Oriented Design application
- Created a user's guide which was released with software to DOD agencies

Education

2013 Cedarville University Cedarville, OH

- Bachelor of Science in Computer Science
- Minor in Mathematics

Accomplishments

- Developed a custom UI framework with notifications, user preferences, help information, logging, automatic updates, plugins, and email support for user feedback
- Created a vehicle control and monitoring application
 - Talked with devices using TCP, UDP Multicast, Iridium, ENet, Serial Port
 - Integrated VLC with Qt to show a live video feed
 - Drove the vehicle using a gamepad with sdl2
 - Mapped the vehicle's progress using Leaflet
- Constructed live FFT plots to analyze real time under water acoustics
 - Converted incoming binary data to a Wav file
 - Plotted a software O-Scope for debugging