Leon Frickensmith

@ leonfrickensmith@gmail.com   github.com/lfricken   📞 217 255 0626   📍 Madison, WI

EXPERIENCE

Software Developer
Epic Systems
📅 2016 - Present   📍 Madison, WI

- Led development of a shared view framework used across several teams which included an asynchronous popup framework and new data reloading features in .NET
- Created background jobs that automated work for hundreds of millions of records for the largest hospitals in the US
- Improved performance in core user workflows by 10 to 30 percent
- Designed and developed full stack features across Referrals, Orders, and Medical Authorizations workflows
- Fixed injection and other security holes in database
- Spearheaded web migration effort using an internal framework to reduce development time by ~80 percent, saving hundreds of hours
- Developed system for LLM to summarize large documents and place those summaries into user workflows to reduce workload
- Visited hospitals to assist with customer installations and assess user needs and workflows
- Maintained patient chart synchronization behavior across deployments, each with millions of records

Software Developer Intern
Epic Systems
📅 2015 - Summer   📍 Madison, WI

- Co-created an MVC web app which used Google maps to help schedulers pick better locations for patient appointments

EDUCATION

BS Computer Science
University of Illinois Urbana-Champaign
📅 2012 - 2016

- Interactive Computer Graphics I & II
- Software Engineering I & II
- Numerical Methods
- Artificial Intelligence
- Database Systems
- Programming Languages and Compilers

TECH STACK

C# C++ TypeScript Python Lua OpenGL React JavaScript Intersystems-Caché Git SVN

INTERESTS

- Distributed Computing
- Physics and Simulations
- Software Design Principles
- Highly Testable Code
- Programming Languages

OTHER PROJECTS
See code, pictures, and more at github.com/lfricken

Illinois Robotics In Space

- Generated obstacle map by processing raw input from Xbox 360 Kinect's infrared sensor and accelerometer using libfreenect for use in NASA competition
- Multithreaded Kinect processing and point-map transform operations to nearly double performance
- Integrated obstacle information into the robot's path planning component via ROS Nodes

Browser Based Boardgames

- Created Express based web app designed to be played by 5+ people
- Utilized React on the client for good performance and responsive layout
- Included Bootstrap to easily improve user experience, including a live chat and whisper system

Space Combat MOBA

- Used libraries SFML and Box2D in C++ to create a real-time space combat videogame
- Followed good design principles so multiplayer was simple to implement and debug
- Organized and lead a team of 8 other devs in Software Engineering II to add features and tests as the primary semester project

GPU Accelerated Heat and Gas Simulation

- Designed a model of gas and heat flow on a 2D grid
- Implemented OpenGL shader to multithread the computation to thousands of GPU processors
- Created asynchronous API in C# to easily get, set, and change data within the simulation for use in a game