

OBJECTIVE Grow amazing software for a better world.

COMPUTER SKILLS **Languages & Software:** C++, Java, Perl, Lua, Qt, GCC, CMake, OpenCV, ZeroMQ
Operating Systems: Linux, Windows, Mac

EXPERIENCE **Senior Software Engineer** 2008-Present
Nokia HERE, R&D Department, Chicago, IL

- Instrumental in the design and implementation of a computer vision system which runs on a large computer cluster for processing petabytes of image data.
- Built novel visual debugging and instrumentation tools for developing computer vision algorithms.
- Worked on reporting software to help analyze the performance of our algorithms.
- Designed wire protocols to distribute and process data built on ZeroMQ.
- Worked on a spline editing tool for HERE's internal mapping software.

Software Engineer 2006-2008
SSS-Software, Lisle IL

- Designed and implemented a GIS mapping server which was the back-end to the client side offering.
- Wrote decoders for government and proprietary image formats from spec.
- Created a custom rasterizer to render vector data within the GIS mapping server.
- Built an artful renderer of elevation data which supported multiple lights and self shadowing.

Research Programmer 2002-2006
North Central College, Naperville, IL

- Designed and implemented stock simulation software in C++ which ran on the university's computer cluster.
- Implemented dozens of stock indicators to experiment with various parametric optimizations and their performance on historical data.
- Wrote a 'top' replacement in C++ to display system statistics for a Linux system with a curses user interface.

Contract Programmer 2003-2005
Design Concepts, Western Suburbs, IL

- Wrote an MP3 music library manager similar to iTunes but targeted towards inexperienced computer users and the elderly.

FREE SOFTWARE Download/View at **www.mempko.com**

- **Firestr** A simple but amazing P2P computation and communication platform.
- **Muda** A web task list manager written using the DCI programming pattern.
- **NCC** 3D game engine written in C++/Lua. OpenGL, Physics, OpenAL
- **Neural** Neural-net library and demos in C++

EDUCATION **Bachelor of Science, Computer Science**
North Central College, Naperville, IL January 2006