

## Eyal Amir

620 The Village Unit 110, Redondo Beach, CA 90277  
Home Phone: (424) 210-5395, Cell Phone: (310) 908-5395  
Eyal@eyalamir.com

**OBJECTIVE:** Software engineering and development.

**SKILLS:** Proficient in: PHP, JavaScript, jQuery, Python, SQL, C++, Qt  
Familiar with: Java, C, Objective-C, Lex/Yakk  
Software used: Visual Studio, Xcode, SQL Server, MySQL, CVS, SVN, Mercurial  
Platforms used: Windows 2000/XP/Vista/7, Linux, Mac OS X

**EXPERIENCE: Software Consulting** **2010 – Present**

Provide engineering consulting services for various software projects including embedded software, image processing and various hardware control systems.

- Developed a multi-threaded Qt application for camera control and fast image acquisition.
- Designed interfaces for use with three different cameras including network communication, serial communication and frame grabber/camera link interfaces.
- Converted image processing algorithms from MATLAB to both C++/Qt and to DSP.
- Coded DSP algorithms for maximum efficiency to meet performance and memory constraints.
- Developed a multi-threaded Qt application for line scanner control and real-time 3D image display and manipulation using OpenGL.
- Developed feature extraction algorithms for detecting specific objects in an image.
- Hired and led hardware engineer in FPGA development for hardware image processing.

**Senior Member of Technical Staff**  
**The Aerospace Corporation**

**2004 – Present**  
**El Segundo, CA**

Lead developer for many web-based tools. Project lead and lead developer of the C++/Qt Thermal and Contamination Analysis Tools, which includes a modeler and an analyzer.

- Designed and developed both back-end and front-end for several new highly dynamic websites:
  - Near-earth object planetary defense website as an educational tool for designing deflection missions.
  - Terrain services website to return altitude at chosen locations or to return elevation angles to the horizon 360 degrees around a chosen location.
  - Satellite replenishment website showing when satellites' end of life is approaching for planning purposes.
  - Satellite communications website for the study of propagation loss and link budget analysis.
- Completed many enhancement tasks, which included designing requirements, leading software modifications, validating changes, and conducting review meetings for a range of tools including the Space Situation Monitoring Laboratory (SSML) website, the Guide, Assessment, and Database using the Google Earth Tool (GADGET) website, the Thermal and Contamination Analysis Tools (ThermCAT), the Node Modal Analysis Display tool and the GALEX Mission Planning System.
- Successfully led teams of engineers to develop new products and deliver requested capabilities in the Thermal Tools Suite and GADGET under schedule constraints.
- Presided, as president, over the Business Development Working Group chartered to expand the business of the Engineering Applications Department.

**EDUCATION: Master of Science in Computer Science**  
**University of California, Los Angeles**

**March 2006**  
**Los Angeles, CA**

- Graduated Summa Cum Laude with a 3.97 GPA.

**Bachelor of Science in Computer Science and Engineering**  
**University of California, Los Angeles**

**June 2004**  
**Los Angeles, CA**

- Graduated Cum Laude with a 3.95 Major GPA.

**OTHER:** Active DoD Secret Clearance  
Fluent in Hebrew