

Andrew Good

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OBJECTIVE: Computer Applications Software Engineering or Web Development

EDUCATION:

2015	MS / Computer Science	GPA 4.0	Johns Hopkins Univ., Baltimore, MD
2008	MS / Civil Engineering	GPA 4.0	UC –Univ. of California, Irvine, CA

SKILLS SUMMARY:

C/C++, Java, Python, SQL
Javascript, jQuery / jQueryUI, DHTMLX, Prototype
AJAX, HTML5, CSS
User Interface, Database Query, Web Client-Server Development
Unix, Linux, Cygwin, Android, Windows, Cygwin
Computer Vision
Autodesk Product APIs

CORE COMPETENCIES:

- Ability in web client-server programming, database queries, user interface and computer vision.
- Ability to perform multi-dimensional data analysis, algorithm development, augmentation of existing complex software and user interfaces.
- Ability to work with multiple languages, environments and platforms.
- Outstanding analytical skills regarding data, scheduling, costing, and resource optimization.
- Strong oral, written, and presentation skills.
- Team player with excellent collaboration skills with management and the working teams in assessing plans and improving existing software tools .
- Self-starter who is able to attend to details, attain goals and adapt to fast-paced environments.

WORK EXPERIENCE:

2015 – Present: Software Engineer, Self Employed ([A Good Development LLC](#))

- Worked with [Montage Project](#) at Caltech (NSF-funded) to wrap their astronomical image processing and visualization software with Python and an interactive, browser-based GUI.
- Building a GUI framework for interacting with [SQLite](#) databases (also in support of science use).

2014 – 2015: Independent Projects in Graduate School at Johns Hopkins Univ.

- **Python Computer Vision Displacement Mapper**
- Designed and implemented a Python utility for the OpenCV computer vision system for parameterized displacement mapping.
- **Client/Server Multi-User Web Application**
- Used a LINUX server-based custom DBMS to maintain state and rules, and used JavaScript/HTML5 client code for animation/interaction.
- Implemented an interactive, web-based version of the classic Clue multi-player board game.

- **Android Cell Phone Real-Time Game**
- Created an end-user rolling ball maze game software application for the Android platform.
- Measured gravity and device acceleration and used in the model in real time.

2009 – Present: Instructor, Mathnasium, Pasadena, CA

- Delivered private tutoring to students in grades K-14 in a nationally-franchised academic center. Specialized in higher mathematics, such as linear algebra and calculus.
- Utilized superb communication skills with all stakeholders, including supervisors, peers, students, parents, and the larger community.
- Collaborated with younger instructors in training them and assisting them with difficult assignments and varied aspects of their jobs to successfully meet academic goals.

2008 – 2009: Structural Designer, Tetra Tech, Pasadena, CA

- Worked on various engineering projects in Orange County, CA.
- Collaborated closely with multi-disciplinary teams on projects involving my work, sharing design calculations and drafting details.
- Designed reinforced concrete structures for the Irvine Ranch Water District's Michelson Water Recycling Plant, which involved about 6 months of collaboration with other structural designers in the Irvine Office of Tetra Tech.
- Coordinated daily with architectural team in meeting project completion goals.
- Contributed calculations to secondary structures, such as walkways, retaining walls, fountains, drainage basins, and foundations.
- Drafted various steel and reinforced concrete structures using 3D visualization, calculations, and specifications, as well as Autodesk.

2008 – 2008: Independent Project while at UC Graduate School for Civil Engineering

- Master's Thesis involved writing the software and building hardware to process in real-time vibrational data monitoring the structural health of large buildings.
- Windows-based Visual C code, including software emulator of oscilloscope interface for visual monitoring.
- Involved constructing sensor / A/D interface hardware and packaging system into compact, deployable form.
- Expanded on an undergraduate project using neural networks to analyze vibrational data to detect weakening / failures in structural integrity (buildings, bridges, *etc.*)

WORK EXPERIENCE SUMMARY:

- **2015 – Present:** Software Engineer, Self Employed ([A Good Development LLC](#))
- **2013 - 2015:** Independent Computer projects while doing graduate school studies in CS
- **2009 – Present:** Math Instructor, Mathnasium, Pasadena, CA
- **2008 – 2009:** Structural Designer, Tetra Tech, Pasadena, CA
- **2008 – 2008:** Independent Engineering project while at graduate school for Civil Engineering

PERSONAL INTERESTS:

- Strong believer in the value of education. Enjoy helping young people learn technical skills for their future careers. Tutoring work is more of a hobby than a job; everyone should learn to enjoy math!
- Art. Specific interests are drawing, sculpting, and animal photography.