

MARK A. GUNLOGSON

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SUMMARY

- BSME, California Polytechnic State University, 2006.
- Designer and builder of mechanical devices including module for Human Powered Vehicle for annual race; innovative lawn care aide; and stilt walker bicycle.
- Experience as construction foreman and assistant in road design.
- Skills in using a wide range of design, fabrication, and business solutions.
- Highly motivated, disciplined and resourceful. Interact productively with people from diverse backgrounds.
- Perform quality work and complete it on time.

EDUCATION

California Polytechnic State University, San Luis Obispo, 6/06

Bachelor of Science, Mechanical Engineering

Class Level: Senior, Current GPA: 3.004

- Combustion Engine Design
- Drilling Engineering
- Single Track Vehicle Design
- Heat Transfer and Thermodynamics
- Mechanical Design/ Strength of Materials
- Thermal System Design
- Petroleum Production Engineering
- Fluid Mechanics
- Mechanical Vibrations
- Manufacturing Processes

ENGINEERING PROJECTS

Front Fork Design for Human Powered Vehicle (HPV) Team, Cal Poly

- Ongoing design enhancements of lightweight HPV for competition. Designed, built and tested aluminum front fork for this successful vehicle.

Single Track Vehicle Design

- Designed and built a bicycle for a stilt walker. The tall bike is 30+” taller than a standard bicycle. The design consisted of two full suspension frames stacked one on top of the other, new front steer tube, new rear triangle and a new drive train.

Fertilizer Injection System for Residential Use (Mechanical Design)

- Individually designed, built, and tested system that eliminates the manual part of applying liquid fertilizer to lawn and shrubs by attaching injector to sprinkler manifold. The device, now functional, is in the final stage of development.

EXPERIENCE

Job Foreman,

Gunner Inc., Redding, CA, Summer 1999 – 2005

- Supervised up to four crafts workers at all stages of residential construction projects. Interpreted technical drawings. Made day-to-day tactical decisions.
- Worked from boyhood for this family owned business. Gained detailed, working knowledge of building trades, tools, and construction techniques.

Assistant,

Road Design Division, Cal Trans, Redding, CA, 11/00 – 4/01

- Among other duties, performed some engineering redesign for a section of existing road.

Technical Assistant,

Network Development Consulting (NDC), Redding, CA, Summer 2000

- Teamed with NDC drafters in implementation of new technical drawing formats.

TECHNICAL SKILLS

AutoCAD R13, R14, 2000-2004; SolidWorks 2003-2006; MATLAB/ Simulink; Engineering Equation Solver (EES); Microsoft Office, BASIC Programming; Machining (Mill, Lathe, Basic hand tools, sheet metal fabrication, [CNC](#))

operations); welding processes and theory (GMAW, GTAW, gas, laser, spot, etc.); basic electronic design/fabrication.