

TRAVIS BUMGARNER

CONTACT

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EDUCATION

Rutgers University New Brunswick, NJ
B.S. in Mechanical Engineering 5/13

SKILLS

Technical Skills

- *SolidWorks*: Three years of experience (internship, college classes, senior design)
- *AutoCAD*: Two years of experience (two internships)
- *3D Printing*: One year of experience (internship)
- *Electric Circuits and Microcontrollers*: One year of experience (internship, senior design, personal study)

Language Skills

- *Proficient Spanish*: Seven years of experience (work and live in Panama, formal education)
- *Beginner Mandarin*: Eight months of experience (intensive tutoring and work abroad in China)

WORK EXPERIENCE

United States Peace Corps Penenomé, Panama
Environmental Health Specialist 6/13 – Present

- Lead community wide project to upgrade water system for 25 households.
- Collect and analyze data from community interviews and water system surveying.
- Plan and execute decisions with the community water committee related to repairing and improving the current water system.
- Created GPS map making guide to assist other environmental health specialists in water system design.
- Organized two-day water seminar to teach community about the topics of health, construction, system maintenance, and organization.

Volunteer Advisory Council Treasurer 2/14 – Present

- Maintain the council's budget, using Microsoft Excel.
- Oversee volunteer grants, merchandise purchases, and holiday gatherings.
- Update Welcome Book that is given to 100 volunteers annually when they are invited to serve in Peace Corps Panama.

Engineers Without Borders New Brunswick NJ
University of Missouri-Kansas Member 1/13 – Present

- Serve as cultural and language facilitator for team visits to Panama by assisting a group of four team members in conducting household interviews throughout the community during the first phase of a water system project.

Engineers Without Borders (continued)*Rutgers University Member*

6/12 – 6/13

- Created computer-aided design engineering drawings in SolidWorks and AutoCAD of soil composition, borehole construction, and system piping to be used in construction of a well in Kolunje, Kenya.
- Partook in meetings with team members and advisors to solve technical aspects of the well design, educated Kenyan community members about water safety, and wrote proposal to obtain approval for project implementation.

Light Age

Somerset, NJ

Intern

6/12 – 6/13

- Overhauled faulty design of a kinematic mount in Q-Clear laser system for easier adjustment.
- Designed improved housing system for Arecibo Laser System with a focus on safety and ease of operation.
- Met with three departments regularly to plan, track, resolve problems, and set project deadlines.
- Created SolidWorks models of products with data imported from AutoCAD or by taking measurements.
- Organized and maintained a database containing SolidWorks and AutoCAD drawings.
- Used machine shop and MakerBot 3D printer to modify and create parts for testing.

Rutgers University

New Brunswick, NJ

Senior Design Team Leader

8/12 – 5/13

- Led group of five classmates in the year-long design of a system to store solar thermal energy for a period of 24 hours using phase change of materials.
- Organized weekly meetings and reports, created CAD model of entire system, organized the bill of materials (BOM) for purchasing, designed interconnecting piping system, and designed automatic control system to manage temperature and water flow throughout system.

SolidWorks Team Leader

1/10 – 4/10

- Led group of six classmates in the modeling of a power drill in SolidWorks by splitting up work, ensuring timely completion of, and organizing the final presentation.

Siemens

6/11 – 1/12

Intern

Shanghai, China

- Designed new machine layout to improve the quality of products produced by the wire rod mill.
- Converted outdated CAD drawings to AutoCAD for future machine construction.
- Introduced SolidWorks to coworkers through presentations and tutorials.
- Assisted with English language interpretation of documents to improve communication.
- Developed and led four groups of fifteen coworkers for five hours a week in English lessons.

PERSONAL PROJECTS*Electric Circuits and Microcontrollers*

8/12 – 6/13

- Coded and physically created a basic arcade game and 2D printer.
- Used Arduino kit and online resources to learn about the basic elements of circuitry.

Python

7/12 – 8/12

- Watched MIT Open Courseware lectures to learn Python and ProjectEuler.net to practice solving math problems.