

David Diaz Garcia

P.O. Box 265, 500 College Ave, Swarthmore, PA, 19081 * (626)-674-4434 * diazdavid1810@gmail.com

EDUCATION

Swarthmore College, Swarthmore PA | Cumulative GPA: 3.11 Department GPA: 3.22 Graduating: May 2025
Questbridge National Match Scholar – Full Ride Scholarship

Major: Engineering

Relevant Coursework: Mechanics, Linear Physical System Analysis, Fundamental Digital & Embedded Systems; Circuit Electrical Analysis; Directed Reading: Desalination and Membrane Filtration Systems; Calculus (I, II & III); Environmental Justice in Latin America; General Physics II: Biomedical Applications-Electricity and Magnetism

EXPERIENCE

Makerspace Technician, Swarthmore Makerspace, Swarthmore College **September 2022 - Present**

- Problem solve with students about woodshop, 3-D modeling, 3-D printing, laser cutting, and sewing projects, answering questions about where to start, best practices, and how to improve in these respective subjects
- Trained in the use of heavy woodworking equipment like bandsaws, miter saws, drill presses, belt sanders, table saws
- Oversee the safety of all students by ensuring the use of safety goggles, hearing protection, and lung protection
- Create 3-D models using Autodesk 360 Fusion and perform maintenance on nine 3-D printers

Intern, El Monte Tenants Collective and La Madera Community Garden **May 2022 - July 2022**

- Researched ways of applying environmental engineering for direct action at a community level for El Monte residents
- Educated by California indigenous teacher, Nicholas Hummingbird, on Indigenous Traditional Ecological Knowledge
- Curated list of native plants local to the San Gabriel Valley for communities organizing around native plants
- Coordinated a conversion of community space in La Madera Community Garden to a native plant space
- Integrated into Spanish speaking community to set foundations for later community organizing around ecological restoration and food sovereignty by sustaining conversations about these topics day-to-day between members

PROJECTS

Necklace and Earring Holder Projects **August 2022**

- Planned out the minimal use of recycled wood with the goal of creating necklace and earring holders.
- Assembly familiarized me with the Makerspace through common tools and questions that students may ask improving ability to communicate locations of tools, methods of using those tools, and the overall woodworking process

Aluminum Truss Project **March 2022**

- Successfully designed and built an 18" width by 30" length aluminum truss that could hold 1000lb of force with peers
- Worked with cutting saws and drill presses
- Utilized a truss design program to iterate on the design process before constructing truss

LEADERSHIP & SERVICE

Member, Swarthmore American Society for Civil Engineers **January 2022 – Present**

- Attend meetings to discuss future career prospects as a Civil Engineer
- Participate in activities such as meeting, talking, and networking with Civil engineers in the field

Committee Chair, Swarthmore Society for Hispanic Engineers **January 2022 – November 2022**

- Attend chapter board meetings to plan activities centered around the Hispanic experience in various engineering fields
- Created social media advertisements for club events and meetings using Canva

Organizer, El Monte Tenants Collective **June 2021 -August 2022**

- Organized and participated in food distributions funded by and for El Monte community members each Saturday
- Met the direct needs of residents who were experiencing food insecurity and created a shared sense of community

Committee Member, Swarthmore Native American Heritage Month Committee **November 2021- May 2022**

- Meet with other members to discuss and plan events centering indigenous peoples within the continental United States
- Manage \$4000 collectively with committee members throughout the Fall 2021 and Spring 2022 semester

SKILLS

Language: English (Native Fluent), Spanish (Native Proficient)

Computer: Autodesk 360 Fusion, C, MATLAB, Google Suite, Canva, SPSS, Microsoft Word, Excel, PowerPoint

Hands-on: Soldering, Circuit Integration, Woodworking, Hand Tools

Certificates: Swarthmore Makerspace Woodshop Safety Certified