

# Benjamin Gauck

Mechanical Engineering student with experience in full-stack web, iOS development, CAD, and fabrication

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## EDUCATION

<b>University of Edinburgh</b> — B.S. Mechanical Engineering Transfer after study abroad	2025-2027
<b>University of Southern California</b> — B.S. Mechanical Engineering GPA: 3.72, Deans List	2023-2024
<b>Abington Friends School</b> GPA: 4.58	2019-2023

## EXPERIENCE

<b>Office Renovation - The Pluralistic School 1</b> Small team construction work involving structural and electrical work	2025
<b>Formula SAE Team Member - USC</b> Welding and project R&D. Independent and under leadership	2023-2024
<b>Habitat for Humanity Volunteer - Los Angeles</b> On-site application of technical skills—independently and in groups	2024
<b>Prosthetics Design Lab Assistant - Penn State Abington</b> Research and testing 3D printing methods for rapid fabrication of prosthetic sockets	2022
<b>FIRST Robotics Team 4373 - Abington Friends School</b> Lead programmer, team leader, teaching Java and OnShape FIRST Autonomous Mode Programming Award	2018-2023
<b>Tech Department Assistant - Abington Friends School</b> Replaced and repaired computer hardware (laptop screens, power supplies, fans, etc)	2019-2022

## PROJECTS + SKILLS

### Real Estate Analysis Dashboard Website

Full stack web dev using React, Node.js, PostgreSQL; Implemented authentication, AI APIs, intuitive UX design

### iOS Social Media Travel App + Backend

Full stack iOS dev using Swift, SwiftUI, and Vapor; Implemented authentication, extensive database

### iOS Puzzle App + Matching Website

Front end iOS dev, published to App Store; Worked on marketing and system maintenance

### Electric Gokart

Designed and fabricated steel frame, 3kW, 35mph; Learned OnShape, welding, fabrication, part sourcing

### Custom Motion Capture Electronics

Complete arm tracking and mapping to virtual avatar; Arduino <-> Unity, PCB design, electronics design

### CAD/CAM

OnShape  
SolidWorks  
KiCAD  
Inventor CAM

### Design

Illustrator  
Photoshop  
Affinity Photo  
Affinity Designer  
Blender  
Sigma + Sketch

### Programming

iOS Front End (Swift)  
Vapor  
TypeScript  
React  
Node.js  
PostgreSQL + Prisma  
Stripe API  
OpenAI API  
Java  
Python  
C# + Unity