1. Introduction

Our team comprises three aspiring mechanical engineers who first connected while working at a 3D printing company. We're all passionate about 3D printing and believe in its future. Frustrated by the high cost of buying filaments for our printers, we decided to make our own to save money.

Duy, our mechanical design expert, came up with the project idea.

Chi, our materials expert, is responsible for ensuring our filament is top-notch.

I'm Nhan, and I handle software, marketing, and sales.

Together, we're on a mission to provide affordable, high-quality filament for 3D printing enthusiasts like us.

1. Approach

To keep our filament project affordable, we didn't go out and buy an expensive manufacturing line, which can cost over $20,000. Instead, we embraced the DIY approach and found clever ways to get the parts we needed at low prices. We scoured scrapyards for some components (like our first find, the extruder) and had others custom-made by skilled vendors.

The only things we bought brand new were the electrical components: motors, circuit breakers, wires, temperature sensors, and temperature control modules. This way, we've been able to maintain a cost-effective approach to our filament project without compromising on quality.

1. Achievement
2. Challenges