

The background features a series of overlapping, semi-transparent green triangles of various shades, creating a layered, mountain-like effect. A wide, horizontal band of textured orange and yellow, resembling a torn paper or fabric edge, runs across the middle of the image. The text is positioned within this band.

# Raoul-Emil Khouiri

Portfolio

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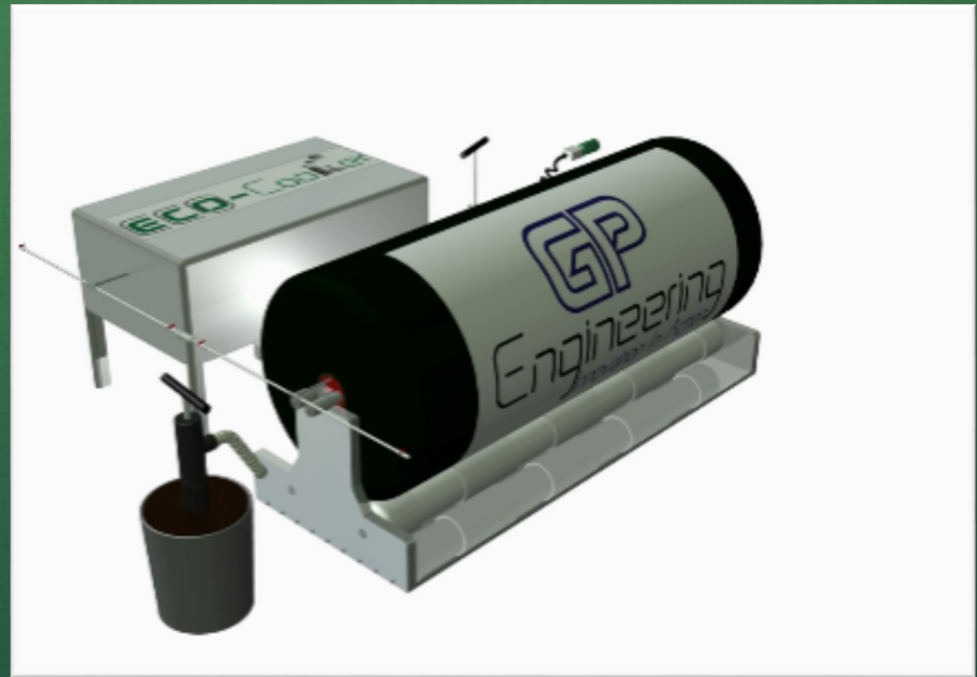
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# ECO-Cooker

- Gulliver Preparatory sent my team to the NASA Space Center in Houston, Texas to present our methane harvesting system (Eco-Cooker) to a series of judges in competition with other teams in the Conrad Awards - Spirit of Innovation Challenge.
- Of the 472 teams in the clean energy competition, my team was chosen as the grand recipient of the \$10,000 prize.





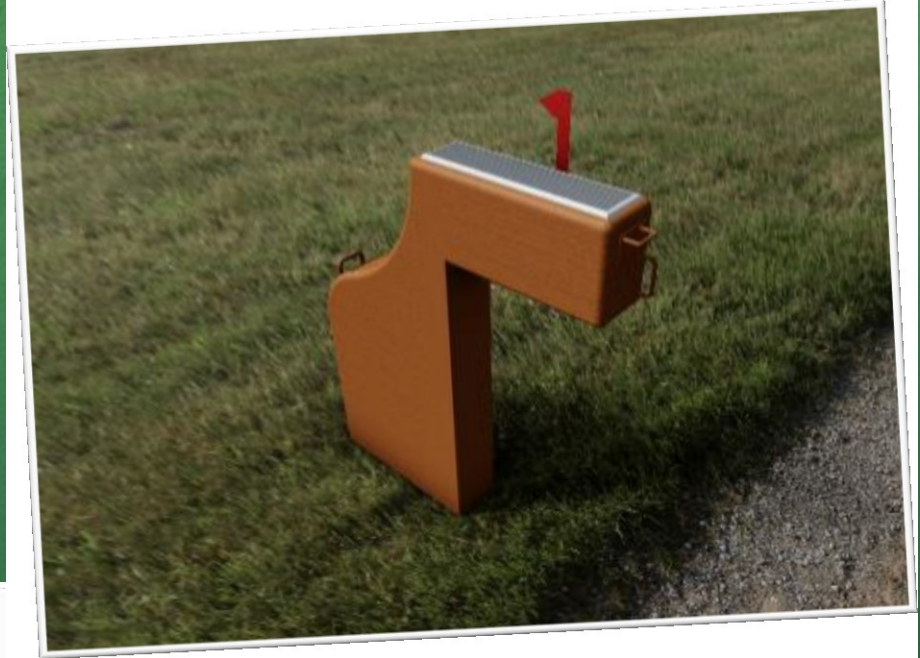
- The team used a vacuum bag in conjunction with a manual pump that are both integrated into the carry-on design
- In order to maximize space. The product will fit into all stowaway spaces
- It was designed to cost \$500, and it will be safe and easy to use.







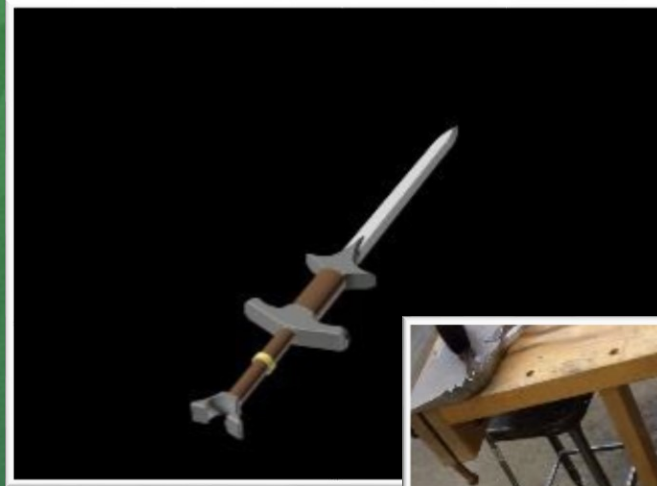
- The team created a smart mail box that not only kept the users mail safe it also notifies the user when he or her has mail via text message.
- The design utilized solar panels in order to avoid large battery needs
- The design uses padlocks to keep the users mail safe.
- There is a recycling bin in the back of the mail box.





# Sword Project

- Using Autodesk Inventor, created the design for a sword.
- Using Maya, rendered Images of the sword.
- Using Mastercam, created the G-code
- Using the router in the MIT Hobby Shop, cut out the sword from a plank of wood.
- Using spray paint and athletic tape, decorated the sword



# 3DS Max Work

## Cannon



Following a class. Created a cannon firing scene in 3DS max.

## Pod Racer



Following a class. Created a Pod Racing scene in 3DS Max



# 3D Designs



Created a Car in Autodesk Inventor and rendered the image and environment using Showcase.



Created a Car Rim in Autodesk Inventor and rendered the image and environment using Showcase.



# 3D Designs



Created a Crying Heart in Autodesk Inventor.



Created a Viking Helmet in 3DS max.

# Machinima Project

- With the aid of the MIT Game Lab, the team is creating a machinima parody titled “FREE SPEECH”.
- The team both designed and rigged characters for the machinima parody using Autodesk Maya.
- Currently the team is in the process of filming the machinima parody.





# Gulliver Engineering

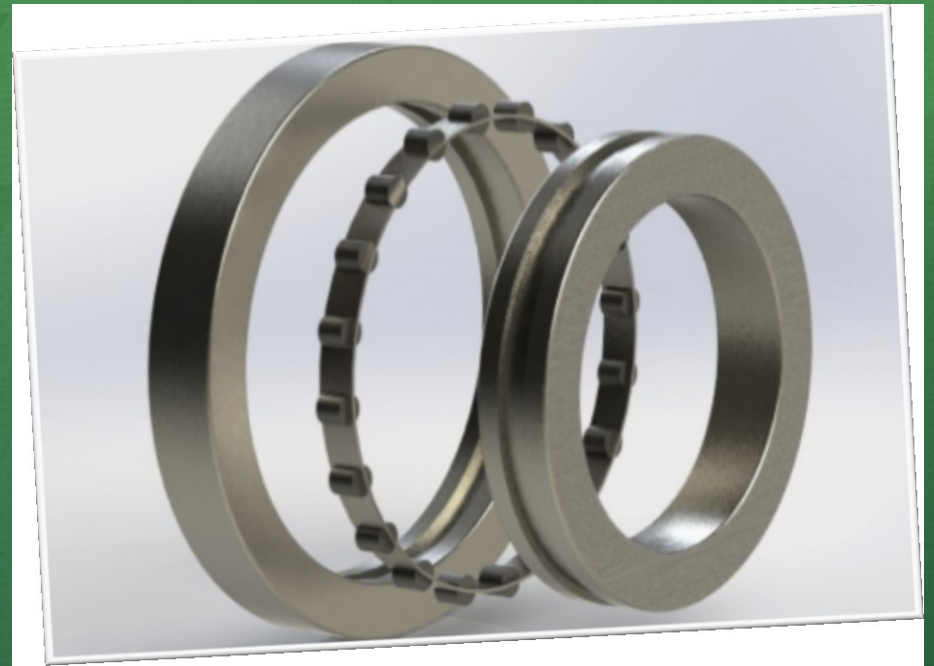
- The lead designer for the engineering team, submitting products such as the Eco-Cooker to international design competitions such as the Conrad Competition.
- Contributed to the Gulliver's water filtration device project that worked on providing clean water to developing nations.





# Past Employment

- Designed and 3D printed prototype medical parts, and then produced them on a CNC machine at a machine shop.
- Worked on new projects such as an Oleophobic Bearing
- Designed aviation parts in 3D CAD for Piece Makers, a FAA-approved machine shop.





# Ceramics

- After designing a dragon in 3DS Max and 3D printing it. I created a ceramic dragon using maccabee clay and the 3D printed model. After firing the dragon, I glazed it using platinum high fire glaze.
- Experience also included making multiple pots and cups using the clay wheel.





# Athletics

- Played varsity football since 9<sup>th</sup> grade and a 1<sup>st</sup> string player since 10<sup>th</sup> grade.
- Team captain during Senior Year
- Second Team All Dade for Football 2014
- Miami Dade's Student Athlete for 2013-2014
- Playing for MIT's football team

