### Raoul-Emil Roger Khouri

Address: 478 Bay Lane, Miami, FL 33149 Phone: 786-200-3878 Education: Massachusetts Institute of Technology Class of 2018 Email: RRK@mit.edu

### **HONORS & AWARDS**

**Conrad Competition Champion** 

Grade 11

My school 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.

MIT Book Award Grade 11

Received the MIT book award for my sharpness in Mathematics.

### **CLUBS & ORGANIZATIONS**

Gulliver Preparatory Engineering Team

Grades 10-11

The lead designer for the engineering team, submitting products such as the Eco-Cooker to international design competitions such as the Conrad Competition.

### **Machinima**

MIT Game Lab

Grade 13

With the aid of the MIT Game Lab, the team is creating a machinima parody titled "FREE SPEACH". The team both designed and rigged characters for the machinima parody using Autodesk Maya.

### **ATHLETICS**

College Football

Grade 13

Playing as a defensive linemen for the MIT football team.

### **EMPLOYMENT**

Key Biscayne Dermatology and Plastic surgery

Grades 10-11

Designed and 3D printed prototype medical parts, and then produced them on a CNC machine at a machine shop.

Piece Makers Grades 10-11

Designed aviation parts in 3D CAD for Piece Makers, a FAA-approved machine shop.

## **Advanced Aerospace Components**

Grade 12-13

Constructed a 3D printer for the fabrication of product representations, and created the CAD files for the product representations.

# **PUBLICATIONS**

Co-Author of The Keys to Fat Grafting

Grade 11

The second author in The Keys to Fat Grafting. Submitted to *Annals of Plastic Surgery* (under review). I did the mathematical models and I created figures using 3d CAD and Photoshop.

#### Co-Author of Breast Implant to Fat Conversion

Grade 11

The third author in Implant to Fat Conversion. I derived the algorithm for converting the MRI scans to 3D volumes for measuring the volume of the breast. I also learned 10 different Radiology software programs in order to do so.