Reed LaFleche

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EDUCATION

Massachusetts Institute of Technology, Cambridge, Massachusetts

- B.S. in Mathematics — Aug 2011 – Jun 2015
  - GPA: 4.6/5.0
- Advanced Study Program — Feb 2016 – Jun 2016
- A selection of coursework
  - Flight Vehicle Aerodynamics: Learned to analyze aerodynamic behavior using boundary layers, stability derivatives, slender body theory, etc.
  - Introduction to Algorithms: Learned about computation structures and Algorithms including sorting algorithms, hashing, heaps, trees, graph algorithms, and dynamic programming.
  - Physics of Solids I: Learned to analyze thermal and electrical properties of solids using quantum mechanics.
  - Unified Engineering: Core aerospace class covering solid structures, signals, propulsion systems, and fluids.
  - Real Analysis: Math course covering topics such as continuity, differentiation, integration, sequences of functions, etc.

Columbia Grammar and Preparatory School, New York, New York

- High School Diploma — Graduated Jun 2011
  - Valedictorian

Columbia University, New York, New York

- Audited math courses after completing high school math curriculum. — Sep 2009 – Jun 2011

AWARDS

- Math Olympiad Summer Program — Jun 2010
  The top 57 scorers on the USA Math Olympiad were admitted
- English Department Award for Best Term Paper — May 2010

WORK EXPERIENCE

MIT Gas Turbine Lab, Cambridge, MA

- Researcher — Mar 2017 – Feb 2018
  - Worked under AeroAstro Professor Zoltan Spakovzsky
  - Used CFD and MATLAB to model engine data as part of a project for Mitsubishi Heavy Industries.

Avidyne Corporation, Lincoln, MA

- System Engineer Intern — Jun 2013 – Aug 2013
  - Worked under Steve Rosker
  - As part of the development of the IFD540 and Entegra 9.3 Avionics systems, used Visual Basic to write and run software tests.

MIT Laboratory for Nuclear Science-Particle Physics Collaboration, Cambridge, MA

- Researcher — Jun 2012 – Sep 2012
  - Worked under Physics Professor Christoph Paus
  - As part of CERN's Compact Muon Solenoid Experiment, learned and used the C++ based programming language ROOT to analyze data produced at the Large Hadron Collider.
  - The experiment found evidence for the existence of the Higgs Boson during this time.

SKILLS

Computer Languages: Classes on Python and Java. Extensive experience in a C++ based language for research. Extensive experience with MATLAB. Some Visual Basic.
Some experience with XFOIL, MTFLOW, Numeca aerodynamic simulation programs.

INTERESTS

Philosophy, Music, 19th Century Literature