# Elias F. Rubin

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## Education

**Princeton University**Princeton, NJ

A.B. ASTROPHYSICS

Expected grad. May 2017

CERTIFICATES IN APPLICATIONS OF COMPUTING AND STATISTICS & MACHINE LEARNING

Coursework includes Algorithms and Data Structures, Programming Systems, Machine Learning, Probability and Stochastic Systems, Cosmology, General Relativity, Research Methods in Astrophysics, Stars and Star Formation, Thermal Physics, and Quantum Mechanics.

SAT: 800 Critical Reading, 800 Writing, 760 Math

Skills \_\_\_\_

**Programming** Python, Java, C, Julia, Bash, Unix and Mac OS X, LaTeX, Git

**Languages** English, Swahili

# Experience \_\_\_\_\_

# **Princeton University Department of Astrophysics**

Princeton, NJ

SUMMER RESEARCH ASSOCIATE

June 2015 - August 2015

- Worked with faculty and research staff to model radiation feedback effects in giant molecular clouds using massively parallel radiation hydrodynamics simulations on a variety of architectures.
- Added additional physics to and wrote new simulation code for the Athena MHD modeling software in C.
- Managed and analyzed large amounts of simulation data using Python and Bash.
- Presented results to department faculty and research staff as well as members of the public.

#### **Anchorage Junior Nordic League**

Anchorage, AK

Соасн

Jan 2012 - March 2013

- Instructed children ages 6-9 in cross-country skiing.
- Independently managed a group of between four and twelve skiers with various levels of experience and fitness.

## Activities and Service

## **Princeton University Outdoor Action Program**

Princeton, NJ

LEADER & TECHNICAL SKILLS TRAINER

2014 - Present

- Led a multiday wilderness backpacking orientation trip for first-year students.
- · Continued to serve as a peer resource to first-year students throughout the academic year.
- Taught underclassmen interested in becoming Outdoor Action leaders technical wilderness skills and Leave No Trace principles.
- Led refresher classes for Outdoor Action Leaders before their orientation trips.
- Contributed to development of Technical Skills and Leave No Trace curriculum.

# **Sans Comic Sketch Comedy**

Princeton, NJ

WRITING DIRECTOR

**ENGLISH TEACHER** 

2015

- Cofounded a new sketch comedy group at Princeton.
- Wrote several sketches and helped other writers develop their material.

#### **Mwenge English School**

Dar es Salaam, Tanzania

June 2014 - August 2014

• Taught English in individual and group lessons to adult learners with varying levels of experience.