# Hollis Akins

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GPA: 4.00/4.00

GPA: 3.96/4.00

#### Education

Aug 2018 - Grinnell College, Dean's Scholar, Grinnell, IA.

Present B.A. Physics, expected graduation May 2022

Recipient of the Dean's Scholarship (\$25,000/year) and National Merit Scholarship (\$2,000/year)

Coursework: modern physics, differential equations, archaeoastronomy, linear algebra, mechanics, general relativity

Aug 2014 - The Early College at Guilford, Greensboro, NC.

May 2018 Public high-school dual-enrollment program with Guilford College

Coursework: introductory physics, computational physics, multivariable calculus, geographic information systems, experience

design, observational astronomy, and studio art

#### Work Experience

February 2019 - Science Editor, Grinnell Undergraduate Research Journal, Grinnell, IA.

Present Selected and provided feedback on science submissions for the 2019 journal publication

Utilized Open Journal Systems to organize the peer-review process for student scientific papers

Dec 2018 - Student Mentor, Grinnell College Data Analysis and Social Inquiry Lab (DASIL), Grinnell, IA.

Present Trained and instructed peers in data analysis software such as ArcGIS, Python, and Excel

Prepared Geographic Information Systems (GIS) data and visualizations for faculty and students as needed

May 2018 - Research Assistant, Guilford College Cline Observatory, Greensboro, NC.

Aug 2018 Developed an automated data analysis pipeline and scripted observer system for the Cline Observatory

This system facilitates current and future student research on variable stars, stellar evolution, instrumentation, and more

For more information and details, see www.hollisakins.com

Aug 2017 - Teaching Assistant, Guilford College Art Dept., Greensboro, NC.

Dec 2017 Instructed students in the introductory darkroom photography class at Guilford College

Conducted class demonstrations, mentored students individually, provided feedback on work, and maintained the cleanliness

and function of the photography lab facilities

### Extracurricular Experience

Oct 2018 - Co-Founder, Grinnell Astronomy Group.

Present Led meetings

## Selected Projects & Publications

May 2018 First Author, Imaging planets from imaginary worlds.

Co-authored a paper with Guilford College Professor Don Smith on the pedagogical power of the Lucky Imaging technique for

photographing planets, published in the October 2018 issue of *The Physics Teacher* Presented on this topic at the Guilford Undergraduate Symposium in April 2018

See the article at https://doi.org/10.1119/1.5055339.

Mar 2018 Honorable Mention, SIAM Mathworks Math Modeling Challenge.

Participated, along with five group members, in the 14 hour-long national math modeling competition Developed a model to address several key issues surrounding food insecurity and food waste in the U.S.

See the final paper at www.hollisakins.com

#### Skills

Computer Proficient in Python, LaTeX, MacOS, and Adobe Photoshop, Illustrator, InDesign, and Premiere. Intermediate experience with Linux, Vim, HTML5/CSS3, Excel, and ArcGIS. Some experience with R.