US Citizen
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Adiv Paradise, Ph.D.
Astrophysicist | Climate Scientist | Programmer | Storyteller

Toronto, ON
Canadian Open Work Permit
Languages: English (fluent),
Hebrew (fluent), French (intermediate)

Who am I?

Astrophysics PhD *with experience using **climate models** to both **ask and answer** new **questions** about Earth-like planets and their climates. Looking to apply my skills to the **climate crisis***.

Technical Skills

- High-performance **parallel computing**
- 3D Earth **climate model** execution, modification, and analysis
- **Python** (15 years), Bash, IDL, **Fortran** (8 years), datasets via NetCDF, HDF5, etc.
- **Data visualization**, image editing
- **LaTeX** and **Powerpoint**

Service and Outreach

- **Co-President** of UofT Graduate Astronomy Student Association (GASA); 2016-2017
- 2 years on UofT Graduate Student Union **Board of Directors**; 2017-2019
- **Independent School District 197** Strategic Redesign Committee; 2011
- 2 years on GASA **Mediation Committee**
- **7 public talks** over 3 years (10-45 mins)
- **2 panel appearances**
- 4 radio, TV, and print interviews, 3 upcoming **YouTube episodes**
- "**Ask an Astronomer**" email service
- NASA FINESST Scholarship **Review Panel**

Personal Interests

Ultimate Frisbee – 9 years of organized play
*   5 years with UofT SGS Division 1*
Orchestra – 14 years in various ensembles
*   French horn*
Fish-keeping and aquascaping
*   8 tanks, >50 fish, and hundreds of*
*   shrimp and snails*
Writing – science fiction and fantasy

Experience

PhD Research, University of Toronto
- Extended a large, complex simulation **code**, including creation of streamlined **Python API**, am **primary maintainer** of this codebase
- Created HPC **job management** code that **reduced overhead** and led to **10x more** simulations/week
- Built a simulation post-processing **pipeline** to produce **synthetic observables** for **thousands of planets**
- **Analyzed** tens of thousands of simulations, extracting **statistical trends** and **new insights** into climate physics
- **Trained and supervised** an undergraduate research assistant
- **Communicated results** in 5 papers, 3 conference talks, and 4 posters

University of Minnesota, Developer &
Los Alamos National Lab, Postbac Researcher
- **Developed new algorithms** for faster implicit fluid transport in physics simulations

University of Minnesota, Research Assistant
- **Analysis & classification** of data from spacecraft observing the solar wind
- Created **GUI analysis tool** for easy analysis of data from spacecraft

Teaching Assistant, University of Toronto
- **Led classroom tutorials** for 90-120 students per semester
- Created **term projects** with randomized **forward-modelled** data, **reducing cheating**

Awards

- Over **$127,000 CAD** in competitive graduate and undergraduate fellowships and awards
- LANL "**Outstanding Technical Presentation**"

Education

B.S., Physics & Astronomy - *University of Minnesota, 2014*
Ph.D., Astronomy & Astrophysics - *University of Toronto, November 2021*

adivparadise.ca   **github.com/alphaparrot**