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| DANIELLE RUTH SKINNER  COMPUTATIONAL ASTROPHYSICIST   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  | | --- | | SUMMARY  I am a computational astrophysicist completing my Physics PhD at the Georgia Institute of Technology with an anticipated graduation date of May 2023. I am a skilled Python programmer and data analyst looking for a data focused career. I am passionate about diversity and equity efforts and am trained in modern pedagogy to maximize audience learning. |  |  | | --- | | EDUCATION PhD in Physics | May 2023 | Georgia Tech Minor: Higher Education MS in Physics | August 2018 | Georgia TechBS in Physics & Astronomy | June 2017 | University of Washington Double minor: Mathematics & Philosophy |  |  | | --- | | EXPERIENCE Graduate Research Assistant | Georgia Tech | 2018 - Present  * Executed cosmological simulations on high performance computers to study the effects of neutron star mergers. * Awarded the FINESST grant for *$135,000* funding my final three years of my Ph.D.   **International High Performance Computing Summer School Kobe, Japan | July 2019**   * Topics covered: Parallel programming, MPI, OpenMP, HPC and Python, Scientific Visualization, Machine Learning |  |  | | --- | | PROJECTS  **Correlation of neutron star merger (NSM) parameters with star formation**, Georgia Tech   * Executed and analyzed volumetric time-series forward-modelling simulations on high-performance computers. * Created data analysis pipelines for over 40 Tb of data to ensure efficient programming.   **Generating fitting pipelines for photometric data from JWST**, Georgia Tech   * Modeled spectral energy distributions using analytic functions of star and galaxy formation to fit photometric data. * Collaborated with a team of researchers to create a fitting pipeline and maintained version control via Github. | | |  |  | | --- | --- | | CONTACT | | | Email with solid fill | daniellerenniks@gmail.com | | Speaker phone with solid fill | 7202737788 | | Web design with solid fill | [drenniks.github.io](https://drenniks.github.io/) | |  | [linkedin.com/in/drenniks](http://linkedin.com/in/drenniks) |  |  | | --- | | SKILLS Data analysis | Data visualization | Data reduction | Feature engineering |Qualitative data | Unstructured data | Volumetric data | Public speaking | Technical writing | Statistics | Modern pedagogy |   PROGRAMMING  Python | C++ | Yt | Numpy  JSON | SciPy | Jupyter | H5py Matplotlib | Git | Linux | HTML | Bash scripting | slurm | LaTeX  Mac/Windows   |  | | --- | | LEADERSHIP   * Co-founder, Physics Allies for Wellness, Georgia Tech * Mentoring chair, Graduate Association of Physicists * President, Graduate Association of Physicists * Diversity, Equity, and Inclusion Committee, School of Physics, Georgia Tech * Mentored 8 undergraduate and graduate students. |  |  | | --- | | CERTIFICATIONS   * Tech to Teaching Certificate, Georgia Tech * Associate Certificate, Center for Integration of Research, Teaching and Learning * Machine Shop Certificate, University of Washington | | |