

## Job Title: **Part-time Remote Computational Astronomy Researcher**

### Job Advertisement:

The Shanati Project of the Institute for the Study of the Ancient World, New York University, seeks to hire a **Graduate Researcher, Astronomy**, as a consultant to use software to output first lunar visibility data for ancient times in connection with our project's chronological reconstruction of the ancient Babylonian calendar.

Must be knowledgeable of solar system astronomy and open to working with historical datasets. The main task is to use Alcyone Software's "Planetary, Stellar, and Lunar Visibility" freeware to output accurate historical dates for first lunar visibility and convert the data in line with Shanati's data model. This position is overseen by Alexander Jones and will work collaboratively with David Danzig.

This position is a part-time consultancy for 3 months from 9/1/2022 to 11/30/2022 for 37 hours in total (average of 3.1 hours per week) and begins as soon as hiring is complete or at an agreed upon date. Compensation is \$33 per hour, for a total of \$1,221. *Work must be done remotely* and not require technical or academic resources from NYU. *US and Non-US citizens are encouraged to apply*. Taxes will not be withheld. Naturally, other employment may be coterminous, but Shanati requires a firm commitment to the aforementioned hours.

Please email inquiries to [alexander.jones@nyu.edu](mailto:alexander.jones@nyu.edu). Applications, including cover letter, CV, and two references, are welcome as well. Interviews will be scheduled on a rolling basis.

### Description of the Shanati project:

Shanati's goal is to reconstruct the daily ancient Babylonian calendar between 750 BCE – 100 CE by collecting and integrating all available textual evidence (mainly in cuneiform economic and scholarly texts), and coupling that with a calibrated astronomical model for first lunar visibility. There are four major areas of research. One is providing evidence for the length of months, in particular those with a 30<sup>th</sup> day. Two is providing evidence for the addition of extra, intercalary months in the calendar. Three is providing evidence for the sequence of regnal years and potential regnal overlaps, particularly at times of chronological uncertainty, often due to political and social unrest. Four is investigating the ancient Babylonian methods, practicalities, and theories of making these calendrical decisions. The output timeline will be aligned with the proleptic Julian Calendar, as well as other ancient calendars, to allow for conversions of any date back to 750 BCE.

Shanati will present these results in a book length print publication, as well as in a state-of-the-art website that will include an embeddable widget, API, simple date conversion interface, advanced custom search, and automated data input portal. The API and embeddable widget will allow for the use of Shanati's results by other websites. The search interfaces will allow for quick date conversions and for in depth studies that show the full range of evidence supporting any specific date. The portal for further input of data will allow for more attested dates to be added in the future, as more texts are discovered, read, and databased, in a fashion that will update the integration of all the data anew to create the most accurate version of the daily chronology.

Shanati is proud to be funded by the National Endowment for the Humanities with a Digital Humanities Advancement Grant for two years, with Alexander Jones, Director of New York University's Institute for the Study of the Ancient World, as its Principal Investigator, and David Danzig, Researcher at ISAW and the project's creator, as its Lead Researcher. See [shanati.org](http://shanati.org) for more information.