

Jay Marie Baptista

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SUMMARY

I am a first-generation college student and astrophysics undergraduate who is interested in cosmological and extragalactic research. Additionally, I am looking to diversify my experience in fields like exoplanet and stellar astronomy.

EDUCATION

Yale University, New Haven, CT — Astrophysics B.S., 2023
Lahainaluna High School, Lahaina, HI — 2019, Valedictorian, 4.2 GPA, Academic Honors

EXPERIENCE/WORK

Galactic Astrophysics Research (M. Geha Lab) — 2020-Present

Researching methods of determining star memberships within various ultra-faint dwarf galaxies. I am investigating different statistical methods utilizing stellar isochrones, half-light radii, radial velocity dispersions, and elemental line strengths from spectra.

Library Service Assistant (Sterling Memorial Library) — 2019-Present

Categorize incoming book returns through the Library of Congress organization system, re-shelve books, and assist in work at the circulation desk. Trained in accuracy checking, filing, and shelf-reading, as well as answering inquiries in-person or over the phone.

Voter Assistance Official, State of Hawaii Office of Elections — August & November 2018

Verified voter identification and issued voting ballots in the 2018 primaries. Registered prospective voters through new same-day registration system during the 2018 midterm elections.

Water Quality Sampling Volunteer, Hui O Ka Wai Ola — June & July 2018

Calibrated electronic probes, prepared sensors and sampling equipment, collected ocean water samples, and collected quantitative scientific data from 19 various sites across West Maui. Gained laboratory skills from oceanic sample acquisition to error-checking instrument accuracy.

SKILLS

Experienced with word-processing and spreadsheeting applications, familiar with programming in Java, C#, Python (OpenCV, astropy, emcee), and Javascript (Node.js + front-end development). I am experienced with writing scientific proposals such as telescope allocation proposals (NOAO style) and science communication. I have lengthy experience performing data reductions on CCD images and spectra. I am able to speak intermediate French and intermediate Korean.

EXTRACURRICULARS

Yale Rotaract (Member, Vice President) — 2019-Present

Participated in numerous local community service projects such as volunteering for soup kitchens for feeding the homeless and participating in a beach clean-up of Long Wharf for the annual International Coastal Cleanup. Additionally I have assisted in fundraising for international projects such as the Rohingya Medical Relief project that provided personal protective equipment to Rohingya refugees in Cox's Bazaar during the COVID-19 pandemic.

FELLOWSHIPS AWARDED

- STARS Summer 2020 — *Star Membership Probabilities of Ultra-faint Dwarf Galaxies*