# **Phoebe Scaccia**

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#### **EDUCATION**

#### Rice University, Houston, TX

May 2023

Bachelor of Arts in Astronomy and Computer Science

GPA: 3.61

#### **Relevant Coursework**

Tools and Models for Data Science (TA); Reasoning about Algorithms; Advanced Object Oriented Programming and Design; Compiler Construction for Undergraduate Students; Parallel Computing; Operating Systems and Concurrent Programming; Linear Algebra; Physical Chemistry I/II; Galaxies and Cosmology; Intermediate Mechanics; Intermediate Electrodynamics

#### **SKILLS**

## **Programming Languages**

Advanced: C, Java, Python 3. Proficient: SQL. Familiar: C++, HTML/CSS, Matlab, R.

#### Software, Tools, and Frameworks

Advanced: Agile/Scrum, Git, Liferay, OSGi. Proficient: Gradle, IRAF. Familiar: Hadoop, Linux, Spark, Tableau, TensorFlow.

#### **WORK EXPERIENCE**

# Associate Consultant II. Liferay, Diamond Bar, CA

June 2023 - Present

- Tested a time-consuming version upgrade process and wrote a reference guide that streamlined deployment effort
- Completed 28 tickets while shadowing and assisted my team in completing the final sprint five days early
- Created parallel process to speed up import of over 2,000 users and 200,000 accounts by over 50%

#### Software Engineering Intern. Liferay, Diamond Bar, CA

May 2022 - August 2022

- Collaborated with a team of five developers to build a customer's internal portal using Java, HTML, and MySQL
- Implemented and demoed two full features and completed 32 tickets as a full stack developer
- Wrote and presented a Confluence article in the project wiki on cron job synchronization strategies
- Onboarded fellow intern onto the project over three days

# Undergraduate Researcher. Zhu Group Soft Robotics with AzoLCEs Project, Houston, TX May 2021 - May 2022

- Designed and trained kinematics models for a soft robot using the Keras machine learning library
- Created program to automatically build and test inverse kinematics models with robot calibration data
- Analyzed 5,000 data points containing positional and intensity data to contextualize the models' outputs

# **PROJECTS**

# Classifying Type I and Type II Supernovae Photometrically

April 2023 - May 2023

- Reduced 39 images of nine different supernovae taken with the 0.8 meter telescope at McDonald Observatory in three filters using the IRAF CCDRED and Images packages
- Obtained photometric data on the supernovae using the IRAF phot program on the resulting 27 reduced images
- Performed statistical analysis to determine grouping statistical significance and sky value reduction errors

#### Simulating the Kirkwood Gaps

December 2022

- Built an N-body simulation of the solar system using the Model-View-Controller design pattern in Java
- Ran the simulation with 3,003 particles over ten hours to simulate 3.5 million years of gravity-driven evolution

#### Baldur's Ballers at HackRice 12

September 2022

- Won second place in the Chevron challenge out of 112 hackathon participants
- Coordinated a team of three to design a scheduling program to connect employees and work tickets
- Implemented a SQL Server database, Java connector, and REST API hosted on an HTTP Server

# Snack Rice at HackRice 11

September 2021

- Won the Major League Hacking Twilio and Domain.com challenges out of 245 hackathon participants
- Partnered with a team of four to implement a servery review and recommendation system in Python
- Designed the hosted website using HTML, CSS, and Adobe Illustrator

# **LEADERSHIP**

## Treasurer. Rice Society of Physics and Astronomy Students

August 2022 - May 2023

Secured over \$800 in funding for 17 members to visit Space Center Houston at no personal cost