# Ana Sofia Uzsoy

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#### **EXPERIENCE**

#### **GOOGLE** | SOFTWARE ENGINEERING INTERN

May 2020 - July 2020 | Mountain View, CA (remote)

- Worked on Tensorflow and Kaggle teams
- Created natural language processing (NLP) machine learning code examples using Tensorflow 2 for Kaggle in Python and R
- Led launch of new NLP-focused Kaggle competition

#### NASA LANGLEY RESEARCH CENTER | INTERN

June 2019 - August 2019 | Hampton, VA

- Worked on SAGE III ISS (Stratospheric Aerosol & Gas Experiment on the International Space Station)
- Used machine learning in Python (sklearn and PyTorch) to identify cloud interference in spectroscopic atmospheric measurements.
- Shadowed NASA employees in mission operations and software engineering.

## **UNIVERSITY OF CHICAGO** | UNDERGRADUATE RESEARCHER June 2018 – present | Chicago, IL

- Use Python to analyze data from *Kepler* and *Gaia* missions to calculate radius and mass distribution for ultra-short period exoplanets.
- First-author paper in preparation

#### NC STATE UNIVERISTY | UNDERGRADUATE RESEARCHER August 2017 – present | Raleigh, NC

- Develop open-source computational tools to track the length of *S. pombe* (fission yeast) mitotic spindles over time using Python, Java and FIJI/ImageJ
- First-author paper in preparation

#### **AWARDS**

- 2020 Winner of McCormick Symposium, the NCSU Physics Department Annual Undergraduate Research Symposium
- 2020 Computer Science Department Faculty Senior Scholar, awarded to a rising senior based on academic excellence, intellectual breadth, and depth of character
- 2019 Barry M. Goldwater Scholarship, a national scholarship awarded to promising undergraduates who plan to pursue a research career in engineering, mathematics, or the natural sciences
- 2018 Freshman Physics Outstanding Academic Achievement Award
- 2017 Park Scholarship, a full-ride merit scholarship to NC State awarded on the basis of outstanding accomplishments and potential in scholarship, leadership, character, and service
- 2017 Finalist, Intel International Science & Engineering Fair
- 2017 2nd Place, Beijing Youth Science Creation Competition

### PUBLICATIONS (IN PREPARATION)

Uzsoy AS, Price, M and Rogers L. (2020). The radius and mass distribution of ultra-short period planets. (in prep)

Uzsoy AS, Jennings, J, Kemper, A and Elting M. (2020). Automated tracking of S. pombe spindle elongation dynamics. (in prep)

#### **EDUCATION**

#### NC STATE UNIVERSITY

B.S. COMPUTER SCIENCE
B.S. PHYSICS
MINORS: MATHEMATICS,
OBOE PERFORMANCE
Expected May 2021 | Raleigh, NC

Dean's List (All Semesters) Cum. GPA: 4.0 / 4.0

#### **SKILLS**

#### **PROGRAMMING**

Python • C/C++ • Java • R MATLAB • LATEX • HTML/CSS Assembly • Angular JS

#### **TECHNOLOGY**

Git/Github • UNIX • JUnit • Bash FIJI/ImageJ • Maven • LabView

#### **MISCELLANEOUS**

Spanish (native speaker) • Soldering Circuit wiring • Bacterial culture

#### **COURSEWORK**

Data Structures
Discrete Mathematics
Operating Systems
Software Engineering
Ordinary/Partial Differential Equations
Classical Mechanics
Electricity & Magnetism
Quantum Physics
Thermal Physics
Astrophysics

#### **EXTRACURRICULARS**

Principal Oboe, NCSU Wind Ensemble NCSU Woodwind Quintet NCSU College of Sciences Student Ambassador Service Raleigh Web Committee Competitive Bowling