

# AMRUTA YELAMANCHILI

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## EXPERIENCE

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### NASA Jet Propulsion Laboratory

Pasadena, CA

*Software Engineer, Artificial Intelligence Group*

March 2018 - Present

*Software Intern, Mission Control Systems and Software Architecture*

May 2017 - December 2017

- Developed and maintained the automated scheduling systems used in the operations of the Earth-observing ISS-mounted instruments ECOSTRESS and OCO-3, and the high-risk multi-billion dollar Mars 2020 Perseverance Rover
- Created an explainable AI tool that analyzes Mars 2020 schedules and displays on an AWS-based webpage information to operators about how to change input constraints to achieve their desired schedules
- Rapidly developed multiple software solutions for hardware challenges on ECOSTRESS, achieving a science return 3x what was proposed
- Received a prestigious NASA Early Career Public Achievement medal for work on automated scheduling for ECOSTRESS being critical to the success of the mission
- Presented at multiple space and artificial intelligence conferences, such as SpaceOps and ICAPS workshops

### Athenahealth

San Francisco, CA

*Software Intern, Epocrates Search Team*

May 2016-August 2016

- Expanded the capabilities of search to be able to handle queries relating drugs, diseases, and insurance information
- Prototyped a chatbot for doctors to aid in the the prescription of drugs based on a patient's insurance and diagnosis of conditions
- Worked on the full stack from pulling in database information and indexing it, parsing user input, and creating a frontend user interface

### UC Berkeley EECS Department

Berkeley, CA

*Undergraduate Student Instructor*

May 2015 - December 2017

- Taught four classes over multiple semesters: The Beauty and Joy of Computing, Data Structures, Databases, and Teaching Techniques for Computer Science
- Created and graded homeworks, projects, and exams
- Taught weekly discussion and lab sessions and held office hours for additional student help

## EDUCATION

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### University of California, Berkeley

Berkeley, CA

*B.A. in Computer Science and Applied Mathematics, 3.9 GPA*

August 2013-December 2017

- Selected Courses: Artificial Intelligence, Machine Learning, Algorithms, Data Structures, Databases, Internet Architecture, Operating Systems, Computer Security, Linear Algebra, Numerical Analysis, Real Analysis, Complex Analysis, Abstract Algebra

## PROGRAMMING SKILLS

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<b>Excellent</b>	C++, Python
<b>Proficient</b>	Java, C
<b>Familiar</b>	Javascript, HTML/CSS, SQL