Engineering Educator, The Adler Planetarium, Chicago, IL

## Full Time

Did you know there's a planet in our galaxy where it rains glass? Or that light bounces around inside the Sun for 175,000 years before shooting off into space? If you think that's freaking awesome, and you're passionate about STEM, community outreach, education, and working in a welcoming environment, this might be the place for you!

The Adler Planetarium is seeking an Engineering Educator to join our dynamic team located on Chicago's Museum Campus.

### The Position

The Engineering Educator will develop and implement educational programs focusing on engineering in the Adler Far Horizons laboratory. Far Horizons programs engage high school and undergraduate students and researchers in authentic science and engineering experiences. This position will provide supervision, guidance, and leadership on technology, techniques, processes, training, and standards for these programs. This person will support staff, volunteers and students with education in the methods of engineering for educational programs focused on topics such as high-altitude ballooning, space exploration, and astronomy. This individual will also be responsible for:

- \* Collaborating with staff in Far Horizons, Teen Programs, and Astronomy staff to develop and maintain programs
- \* Setting plans for educational goals and evaluating progress
- \* Creating budget plans and tracks expenditures
- \* Designing and supervising development of engineering solutions and mission hardware such as radio equipment, experimentation hardware, ballooning hardware, and electronics
- \* Developing and assembling electronics packages for communications, data recording, and other functions on packages that fly on high altitude balloons
- \* Consulting on the design of mission hardware for balloon flights, robotic exploration, and other vehicles
- \* Leading work to implement experiences for participants and students during programs such as Astro-Science Workshop, Mission Near Space, Team Stratonauts, and summer camps
- \* Serving as educational supervisor, teacher and mentor to volunteers, and interns.

#### The Person

The Engineering Educator is someone who thrives on leading team environments. They're passionate about the opportunity to share their knowledge of engineering in creative and innovative ways with diverse groups of enthusiastic students and staff. This person is a strong communicator and collaborator who can develop programs and curriculums. They are able to lead, mentor, and train groups from a wide range of technical aptitudes and experiences.

#### Required Qualifications:

- \* Undergraduate degree in engineering, applied science, science education, and/or a related field
- \* 5 years of experience working in science and engineering educational programs
- \* 2 years of experience in electrical and/or electronic engineering
- \* Experience working with high school or undergraduate students, school groups, or other public groups in a team environment
- \* Familiarity with electrical design, schematics, PCB fabrication and CAD tools
- \* Programming skills in C or comparable language
- \* Proficiency or ability to rapidly become proficient with microcontroller programming and hardware design with platforms such as Arduinos and the Raspberry Pi
- \* Working knowledge of Microsoft Excel

# Preferred Qualifications:

- \* Teaching certificate specializing in high school science
- \* Graduate degree in science education, engineering, or related field
- \* 5 years of experience in electrical and/or electronic engineering
- \* Experience leading and developing vocational and/or educational programs focusing on science and engineering

- \* Knowledge of atmospheric ballooning, near-space exploration, telemetry, and telescopes
- \* Experience in any of the following: Embedded systems HW/SW; web-based server-side programming (PHP, Ruby on Rails, etc.); client-side HTML+ javascript (CSS also a plus)
  The Team

The Far Horizons Team is part of the Astronomy, Research, and Collections unit of the Adler. The For Horizon's Team works closely with our Teen Programs to promote STEM and education, experiences, and programming - training the next generation of engineers, physicists, and astronomers and inspiring exploration of that mind-blowing thing we call our Universe.

# Online application:

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