

**Workshop Title: Title of Sample Workshop Proposal**

**Presenters:**

**Salvatore Ride (Contact Person)**

Department of Computer and Space Science

Near Earth Orbit College

1 Geosynchronous Way

Random Location, Random Country

Phone: +999-123-4567

Fax: +999-765-4321

sal\_ride@neo.edu

**Edwina Aldrin**

Department of Computer and Space Science

Lunar University

biz\_aldrin@loony.edu

**Abstract:** Put your at most 100 word description here. For example: This workshop introduces participants to CS education in orbit. We present weightless teaching techniques and advice for transferring Earth-bound curricula. Participants receive handouts describing techniques, worksheets for designing new techniques, and copies of Space Agency recommendations. The workshop proceeds in three sessions in which we: present one technique (such as sensory immersion); practice in simulated weightlessness; and critique in small groups. Further information is at: <http://perhapsincludeaurl>. Remember that the description should be at most 100 words. It should help potential participants and future readers assess their interest.

**Intended audience:** Late secondary and early post-secondary CS educators who are new to near Earth orbit and other weightless educational environments.

### **Presenter Biographies:**

Sal Ride was the first human to teach introductory Computer Science in space. Since then, he has developed two courses on CS education in weightless environments, one targeted to new instructors at Near Earth Orbit College and the other to TAs at NEO. His paper presentation “Weightless Data Structures” at last year’s SIGCSE conference was well received and is the foundation for one of the three sections of this workshop.

Edwina Aldrin is an early graduate of the Near Earth Orbit College CS education program and is currently a graduate student at Lunar University focusing on CS education and space environment simulation. She helped develop several of the key protocols and devices that enable Earth-bound simulation of weightless instruction environments.

Each presenter has previously led versions of this workshop for new students of their respective institutions. Audience feedback has been positive with the exception of nausea issues beyond the presenters’ control.

**Materials provided:** Each participant receives both a paper and electronic copy of (1) detailed handouts to be used during the lecture portions of the workshop, (2) descriptions of the teaching techniques that will be presented written as we will teach participants to write up new techniques, (3) scenarios and questions used during the small group critique portions of the session, and (4) the Space Agency Draft Report on Orbital CS Education. Participants will also receive a trial copy of NEO College’s experimental weightlessness simulation software, good for 10 uses.

### **Rough Agenda:** *New for 2009*

1. Topic one: First Topic, approximately 30 minutes.
  - *Sub topics added here as needed.*
  - *There may be several.*
- N-1.: Topic N-1: Weightless graphs, approximately 10 minutes.
- N.: Topic N: Wrap up and discussion
  - *Total time should add up to 180 minutes.*

**Audio/Visual and Computer requirements:** Ideally, participants will have wireless internet access and laptop power at each seat, but the workshop could proceed without these as internet use will not be central to the workshop and laptop use will be brief. We will also need a digital

projector (for presenters) and a flipchart with pens (for publicly recording small-group critiques). Windows and Mac laptops will be supported. Attendees laptops must have Firewire or USB 2.0 support (to connect the external gravity-cancelling devices provided during the workshop by the presenters).

**Laptop Required:** all participants will need a laptop for weightlessness simulation

**Space and Enrollment restrictions:** Enrollment must be limited to 15, as we have sufficient gravity-cancelling devices for five teams of 3. The room should have ceilings at least 4 meters high to accommodate tossing participants in the air during weightlessness simulations and sufficient floor space for the five teams to maneuver during this process: probably a minimum 3 meter by 5 meter area that we can clear of tables and chairs. (Presenters will supply personal trampolines and safety mats.)

**Other critical information:** Previous versions of this workshop have been presented locally at NEO College and Lunar U. to incoming first year students. The workshop has been revised based on their feedback; so, we confidently expect a smooth experience for SIGCSE participants.