

Newsletter: April, 2021

Dear GAP Members,

I hope this email finds you well. I'm sure most of you are busy wrapping up your classes, making plans for graduation ceremonies, and lining up next year's curriculums. Spring is finally here! May it offer a positive and refreshing change of pace from what has been a particularly challenging year.

Following is the current edition of our bi-annual newsletter, including highlights from the past six months:

- Welcome to the 4 new university members that have joined GAP since October 2020. New members include:
  - The University of the West of England, Bristol, United Kingdom
  - University College London, London, United Kingdom
  - University of Manchester, Manchester, United Kingdom
  - Morgan State University, Baltimore, Maryland
- AdaCore has announced the Winners of the 5th Annual "Make with Ada" programming competition for embedded projects.

The contest, which ran from July 31, 2020, through January 31, 2021, attracted 173 participants from all over the world. This year, the 1<sup>st</sup> place prize of \$2,000 went to Tharindu Suraj Liyanage, Founder, and CEO of UAV-based startup SRQ Robotics, for his <u>Autonomous Crazyflie with ToF Sensors</u>. The Student Prize of \$1,000 was awarded to Ahmed Hamdy, an MSc. Computer & Systems Engineering student at Universiti Teknologi Malaysia in Kuala Lumpur, Malaysia, for his <u>Ada Accelerometer Driver + Stable Nerve Game</u>.

"We were pleased to see more student submissions this year," said Fabien Chouteau, AdaCore Software Engineer and author of the Make with Ada blog post series. "So many life skills can be learned from these types of competitions. We hope that early exposure to Ada and SPARK's sound software engineering principles will provide all of our entrants with foundational skills that they can use throughout their professional careers."

 AdaCore participated as a Bronze Supporter of this year's <u>SIGCSE virtual</u> <u>Technical Symposium</u>, March 13-20, 2021. In addition to a virtual booth, Dr. Patrick Rogers, a member of AdaCore's senior technical staff, hosted a 60-minute virtual meeting on "Learning systems programming, hard real-time programming and formal methods with good language support." The meeting provided an interactive discussion and demonstration revolving around a programming language and tools for teaching systems programming, real-time programming, and practical, teachable formal methods. JG to see if we can get a video file of the recording.

For those of you who are SIGCSE members, you may also be interested to know that the SIGCSE Board is currently inviting applications for the next round of <u>SIGCSE Special Project Grants</u>. Special Project Grants of up to US \$5000 are awarded each year to support projects that will bring some clear benefit to the computing education community in the form of new knowledge, developing or sharing of a resource, or good practice in learning, teaching, or assessment. The deadline for this round is **May 15, 2021**.

- New AdaCore Blogs! In October, I shared links to the first three parts of an 8-Part blog series on Ada for micro:bit. The final entries in the series have been completed and can now be found online. In addition, we recently posted two more blogs that may be of interest. The first one presents a new tool that allows one to start Ada programming on any ARM Cortex-M or RISC-V microcontroller in just a couple of minutes. The second describes an example Board Support Package (BSP) project for the Mini SAM M4. If you would like to learn more about any of these projects, feel free to contact author Fabien Chouteau directly via the blog site.
- Check out our new <u>learn.adacore.com</u> course on <u>Ada for the Embedded C</u>
   <u>Developer</u>. This course introduces you to the Ada language by comparing it to C. It
   also introduces you to the SPARK subset of the Ada programming language, which
   removes a few features of the language with undefined behavior, so that the code is
   fit for sound static analysis techniques.
- AdaCore is offering two online Public Ada Training courses this year the first will take place the week of May 3 and the second will take place the week of September 27. Each 5-day course will include live lectures from AdaCore's expert instructors and hands-on workshops using AdaCore's latest GNAT technology. For more information, or to register, click <a href="here">here</a>. (Note: Registration is currently open for the May event. Registration for the September event will open mid-May)
- Are you working on an exciting project using Ada or SPARK? Share it with the
  community! If your students have recently completed an exciting course,
  assignment, thesis, or doctoral that utilizes Ada and or SPARK, we'd love to add it to
  our growing list of GAP member projects and blogs. All we need are a couple of
  paragraphs describing the work and an accompanying photo.
- Last, but not least....your GAP Membership will automatically expire on May 31.
   As part of the annual renewal process, we will be sending out a survey in mid-May to help us confirm which members will be actively teaching Ada and/or SPARK this

academic year, and to determine what kinds of content and formats will best suit your needs.

As always, thank you for participating in our GAP Program and helping us keep Ada and SPARK at the forefront of university study. If you have any questions, please feel free to contact me or your regional coordinator.

Kind regards,

Jessie Glockner GAP Coordinator AdaCore +1-646-532-2723 glockner@adacore.com