I am honored and excited to serve as the next REA President. I invite you to flip through the pages to learn more about the ways in which REA connects with students, alumni and the School of Engineering (SOE).

Every year, the 20-plus members of our alumni volunteer board brainstorm strategic initiatives to tackle. This year, our initiatives are to strengthen the connection between students and alumni by utilizing existing platforms available at Rice such as Sallyportal, identifying and supporting capital projects that benefit students and SOE, and reviewing and restructuring the organization of our board, including its bylaws and meeting documents. The latter may not be the most visible initiative, but it is necessary to maintain a healthy, active volunteer board to serve the students, alums and SOE effectively. Whether you are a 2017 Rice grad or a former REA Board member who has lost touch with the organization, let’s make this the year that you (re)connect with REA.

Get involved, become an REA Sponsor, join the board or attend our events! You can volunteer by serving on the board of directors or on one of our committees — and you don’t have to be in Houston. If you have questions or just want to connect with us, visit facebook.com/RiceEngineeringAlumni.

Sincerely,

Priya G. Prasad, B.S. ChBE ’08
FY2017–18 President, Rice Engineering Alumni

Outgoing President’s Message

It has been a great honor to serve as the REA president this past year. The REA had another extremely successful year with more scholarships, grants and awards to Rice engineering students, teams and clubs than ever before. This past year, REA provided more than $150,000 in support from REA sponsorships and endowment resources, allowing REA to help students at all levels be successful, to honor alumni, to maintain a network and to support the school. Over a three-year time frame, we dedicated $50,000 to build out a new lab for the Department of Mechanical Engineering. In addition, REA increased its outreach to undergraduate students, and for the first time, we had an undergraduate liaison attend board meetings, helping us better understand the needs of undergraduate students and what excites them about engineering.

I am confident that the REA will continue to grow under the direction of our very capable and enthusiastic incoming president, just as I look forward to continuing my active participation in the REA. Thank you to all who have so generously supported the REA with both your time and sponsorship.

Sincerely,

Joanna Papakonstantinou, MA CAAM ’07, Ph.D. CAAM ’09
FY2016–17 President, Rice Engineering Alumni

Incoming President’s Message

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Sincerely,

Priya G. Prasad, B.S. ChBE ’08
FY2017–18 President, Rice Engineering Alumni
Sponsorships

Thanks to the generous support of our donors, including 443 individual and corporate sponsors, REA raised more than $84,000 in FY2016–17! This is an amazing achievement. Our contributions have directly impacted several programs, teams and projects at Rice, including the Oshman Engineering Design Kitchen, the Rice Center for Engineering Leadership and OwlSpark! Looking ahead, REA has set a goal to double our sponsorship base to 600 individual donors. We need your support to meet this ambitious vision. Consider becoming an REA sponsor to support the School of Engineering and Rice students. Your support makes a difference!

FY2016–17 REA Sponsorship

Fiscal year: July 1, 2016–June 30, 2017

$150,000+
Total REA support, including annual endowment distributions and REA sponsorships, in FY2016–17.

$84,538
Total dollars donated to REA in FY2016–17.

443
Number of REA sponsors in FY2016–17, including corporations and foundations.

Use of Sponsorship Funds

- 7% Executive Committee
- 4% Alumni Honors
- 2% Regional Programs
- 35% Mechanical Engineering Lab Grant
- 22% Grants & Awards
- 30% Education & Outreach

Become an REA Sponsor

Every alumnus or alumna with a degree from the George R. Brown School of Engineering is automatically a member of the REA, although not every member becomes an REA Sponsor. Sponsorship is the lifeblood of the REA — it is what drives all the other endeavors and programs mentioned in this report. Visit alumni.rice.edu/rea/support-rea to initiate or renew your sponsorship for FY2017–18. Please designate your gift for Rice Engineering Alumni (GF60).

For questions about REA sponsorship, or if you are interested in making a gift, please contact Sara Lillehaugen Rice, director of development and team lead for the School of Engineering, at sdl@rice.edu.
Supporting Students

Awards and Scholarships

In addition to financial awards and grants distributed by the School of Engineering, REA manages a number of financial awards and scholarships that are funded with permanent endowments. Together, the School of Engineering and REA presented more than $150,000 in awards at the end-of-year picnic April 22. These included departmental awards for academic merit; awards for leadership, research and service; awards for outstanding engineering students; and other designated named awards. A full list of winners is available at alumni.rice.edu/rea/scholarships.

Internal Combustion Engine (ICE) Lab

Launching its goal of making a long-term investment in the School of Engineering, REA dedicated $30,000 for renovating the Department of Mechanical Engineering’s Internal Combustion Engine (ICE) Lab. That gift is part of a larger $50,000 pledge to improve mechanical engineering labs over the next three years. Full article: https://engineering.rice.edu/news/rea-gives-30k-lab-improvements.

Owlspark

Founded in 2013, the OwlSpark program allows Rice students, faculty, staff and recent alumni to launch companies based on their innovative business ideas. During 12 weeks over the summer, startup teams have access to co-working space in the Texas Medical Center Accelerator (TMCx) and are mentored by experienced entrepreneurs and industry professionals.

Prototype Fund: The REA contributed $5,000 to support OwlSpark’s prototype fund, allowing entrepreneurs to take innovations and ideas from concept to demonstration. Using small grants and an emphasis on low-cost iterative experimentation, startup teams perform research, test core assumptions and explore multiple design options before building out their entire product. This past year, REA funds sponsored Atmospark, which is developing a portable atmospheric water generator for sailboat owners who need fresh water while making multi-day cruises. The students’ technology takes atmospheric water, captures it and purifies it into clean drinking water. They hope one day to make water generators for use in geographical areas where drinking water is scarce. For more info, visit http://www.owlspark.com/teamwise_atmospark.
Student Grants

Our grant program is now in its sixth year and has expanded to include travel support for graduate students to attend and present at premier research conferences. Overall, the program has distributed $15,000 for student-led projects and travel grants. Here are this year’s recipients:

- **Rice Eclipse**: Successfully and safely conduct a test of a rocket engine.
- **Battlebots**: Construct remote-controlled combat robots, informally known as battlebots, that will be taken to special competitions.
- **Seismic Design Team**: Compete in the Fourteenth Annual Undergraduate Seismic Design Competition.
- **HEXIO**: Design a modular building block toy to teach kids the basics of computer engineering and computer logic.
- **Ngen Grow**: Design a prototype of a unique indoor vertical gardening system.
- **Cervical Cancer Project**: Create a low-cost, interactive model that will simulate and train local medical providers living in underserved communities on how to screen for cervical cancer.
- **Rice Electric Vehicle Team**: Compete in SEMA, an annual event in which student teams attempt to design and build the most energy-efficient vehicle possible.
- **Engineers Without Borders**: Take a trip to Nicaragua to collect data necessary for the design of a water collection and distribution system.

Your Contribution Matters: A Special Thank You

To Mr. Montesi and all associated with REA,

Thank you so much for presenting me with the $2,500 scholarship for being a distinguished junior. It means a lot to have engineering alumni who are willing to honor current Rice students with such a great scholarship.

As you know, college is expensive. Thus, any reduction in the amount required to pay tuition comes as a great delight, and for that, I am very thankful. This scholarship will allow me to continue to focus on my studies and continue to engage in extracurricular interests.

Please pass this thank you around to anyone associated with the award that I have missed, and thank you again!

Best,
Jacob Behling ’18

Education and Outreach

**Senior Design Team**: In 2016–2017, the REA provided $5,000 for the SPACEBOT senior design team at OEDK. Their project does not lend itself to corporate support and would not have gone forward without support from REA. The team is working with NASA scientists to build a new actuator for a bipedal humanoid robot.

**Showcase Design Prize**: The winner of the 2017 Excellence in Engineering Design and the $5,000 prize is team Ictal Inhibitors. The team is working towards creating a cure for epilepsy and is using predictive machine learning algorithms that detect seizures, which were developed last year by the REA-sponsored team Pre-ictal Predictors. Congratulations!
Supporting Students (cont.)

From the Seismic Design Team

The seismic design competition was a great success! Our team ranked 12th in communication (including our proposal, poster board and PowerPoint presentations), second in architecture and 26th overall out of 33 teams from 14 states and six countries.

This was a great experience for our undergraduate engineering and architecture students to attend workshops for post-earthquake reconnaissance; to learn about research from graduate students at peer institutions; to meet geotechnical engineers, seismologists, structural engineers and other professionals in the industry; and to grow our knowledge and hone our presentation skills. Thank you for allowing our team this unforgettable experience! We expect to improve next year and appreciate your continued support as we apply for future grants from REA.

Making Memories

Rice Electric Vehicle team receiving an award from REA President Joanna Papakonstantinou ’92

Graduating seniors with REA directors

Constantine Tzouanas ’19, Ajay Subramanian ’18 and Tahir Malik ’17 with REA President Joanna Papakonstantinou ’92

Dean Reginald DesRoches and his family
Connecting Alumni

REA Chapter Programs in 2016–17

Austin: On Oct. 29, REA participated in its fourth annual Habitat for Humanity build. We had a nice-sized group of 13 who spent most of their Saturday in volunteer service, measuring twice and sawing once, hammering, painting, and doing other super handy stuff. What a day! We enjoyed a ton of pizza for lunch and, afterwards, enjoyed delicious Tex-Mex and beverages.

On April 2, REA hosted a kickoff Tech Meetup, geared toward those interested in technology and who would like to get to know other alumni interested in tech. The meetup featured guest speaker Jonathon Morgan, co-host of the podcast “Partially Derivative,” giving a short talk titled “Truth is Dead.” We’re considering another Tech Meetup for this fall, so stay tuned for details.

Save the Date: REA and the Austin Real Estate groups will be co-sponsoring an event on sustainability Oct. 18 at TreeHouse in Austin. We have an exciting panel of alumni lined up: Rice Professor Richard Johnson ’92, Bill Mullane ’75 (architect, ACC), and Meeta Morrison ’87 (an awesome do-it-yourself architect whose house renovation received a 5-star rating from Austin Energy and was featured on the Cool Homes Tour). If you are in the Austin area, or just want to hang out with some awesome Rice alums, definitely come join us! If you have questions, please contact our leader for REA Austin, Robin Brooks ’85, at robin.broox@gmail.com

Boston: We had around 20 Rice alumni (many engineers!) and friends join us at the Museum of Science in Boston this past June. Some of us saw a cool lightning show and others toured the “POPnology” exhibit, where among other things we touched one of the real prop DeLoreans from “Back to the Future.” After the museum tour, we walked over for a pint at our local World of Beer in Cambridge and talked about all the fun we had at Rice and what has since taken us so far from Houston. Overall, it was a top-notch time, and we’re looking forward to hosting something like this again in the future! Are you in Boston? REA members are all across the nation! Be sure to check our newsletter for more Boston area events.

San Francisco Bay Area (SFBA): We had another great year in the Bay Area with the legendary Tesla Factory Tour. Interested in going to awesome events like this? Be on the lookout for updates and upcoming events from our team led by Duo Wu ’12 and Vivas Kumar ’14.

Visit alumni.rice.edu/rea/regional-programs for REA events across the nation.

Alumni Honors

The REA is proud of the several engineering alumni, faculty and engineering supporters who were recognized at the 2017 Association of Rice Alumni Laureates Awards!

Lynn Laverty Elnenhans
Masc ’78
2017 ARA Gold Medal;
2010 REA Outstanding Engineering Alumna

William B. (Bill) Russel
ChE ’69, MChE ’69
2017 Distinguished Alumni Award; Member of the Dean’s Advisory Board

James M. (Jim) Whitehurst CS ’89
2017 Distinguished Alumni Award

Judy Ley Allen ’61
2017 Meritorious Service Award

Robert R. (Bob)
Maxfield EE ’63
2017 Meritorious Service Award; 1999 REA Outstanding Engineering Alumnus

Rebecca Richards-Kortum, Professor of Bioengineering
2017 Meritorious Service Award
Welcome, Dean DesRoches

The members of REA and the board would like to extend a special welcome to Rice’s new Dean of Engineering Reginald DesRoches. Thanks so much for coming to our picnic this year! We look forward to working with Dean DesRoches to enhance the already amazing Rice engineering experience.