In an effort to address this problem, more companies are using technologies to compensate for a lack of skilled workers and managers and to achieve greater efficiency and safety. Many companies are investing in new, labor-saving equipment including UAV’s, robots, 3-D printers, and laser- or GPS-guided equipment, and using new techniques such as modular construction, virtual imaging, bar coding, and laser scanning. Yet this is no easy solution as many companies are concerned with not only the cost but the time it takes to implement and train on these technologies.

In your essay, please address, as a minimum, the following discussion points related to the topic using research and examples from your own experience to support your position:

- Identify and describe those Innovative Technology and Project Execution Tools and Techniques that you feel could improve the construction process
- What is your own experience with these technologies, tools or techniques?
- How is the construction industry addressing this issue, and what are the potential advantages and disadvantages?
- What are your suggestions for addressing challenges?
- Discuss the role that an organization such as the AGC might play in addressing issues related to this topic?

AWARDS
For qualified entries, prizes will be awarded as follows:
- FIRST PRIZE, STUDENT: $1,000 and trip to the 2021 AGC Annual Convention. Prize includes round-trip airfare, plus meals and lodging for five days.
- FIRST PRIZE, FACULTY: $500 and a trip for the faculty sponsor to the 2021 AGC Annual Convention. Prize includes round-trip airfare, plus meals and lodging for five days.
- SECOND PRIZE, STUDENT: $500
- THIRD PRIZE, STUDENT: $300

Note: No cash substitutions will be provided if the first prize winning student or his/her faculty sponsor choose not to participate in the convention trips. Allhands Essay winners will be notified by e-mail in Jan/Feb 2021. Public announcement will be made at the AGC Annual Convention in March 2021 by the AGC Foundation President. In the event an essay is not deemed satisfactory, or does not comply with the essay requirements, the AGC Foundation Board may, at its sole discretion, find the essay unacceptable or limit the number of winners.
Student Checklist

2021 James L. Allhands Essay Competition
Deadline for Submission: November 15, 2020

Complete and return this checklist with your e-mail essay submission for the 2021 James L. Allhands Essay Competition:

ESSAY SUBMITTED BY:

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The following items are to be included with this application for the 2021 Allhands Competition:

1. Completed Student Checklist (this page)
2. Letter from faculty sponsor on university letterhead confirming student’s full time and class status, AND signed faculty sponsor checklist verifying that the essay was proofed for grammar and technical errors; is ready for publication; and has not been plagiarized.
3. A 100-word abstract (not included in 10-page essay maximum)
4. Double-spaced, typed essay, 10-pages maximum including charts, graphics and the bibliography page. The title page is not included in the 10-page maximum. (see Essay Format Requirements)

I hereby submit the enclosed essay for consideration in the James L. Allhands Essay Competition and attest that I am its sole author.

Signature: ____________________________________________ Date: __________________________

AGC EDUCATION AND RESEARCH FOUNDATION
2300 Wilson Blvd - Suite 300, Arlington, VA 22201 ■ Phone (703) 837-5356 ■ Fax (703) 837-5451 ■ courtney.bishop@agc.org
2021 James L. Allhands Essay Competition

All essays will be evaluated by a team of contractors and educators from the AGC Foundation Board of Directors. It should be noted that the following items are MAJOR considerations in judging the entries:

- Clarity
- Original, unique ideas
- Specific examples to support opinions
- Grammar, spelling, punctuation
- Neatness
- Adherence to format and MLA standards
- Adherence to guidelines such as length, abstract, bibliography, submission deadline

2021 James L. Allhands Essay Competition Topic

**How New, Innovative Technology and Project Execution Tools and Techniques Can Be Used to Improve the Construction Process (Including Safety and Efficiency).**

The construction industry continues to perform well and all indications are that the construction economy will continue to expand. However, recruiting enough employees to perform this work remains a challenge. The last four AGC’s Construction Hiring and Business Outlook Reports have reported that most construction companies find it hard to locate, hire and retain both craft and professional employees. In addition, like all businesses, contractors must continue to seek ways to improve efficiency in order to remain competitive.

In an effort to address this problem, more companies are using technologies to compensate for a lack of skilled workers and managers and to achieve greater efficiency and safety. Many companies are investing in new, labor-saving equipment including UAV’s, robots, 3-D printers, and laser- or GPS-guided equipment, and using new techniques such as modular construction, virtual imaging, bar coding, and laser scanning. Yet this is no easy solution as many companies are concerned with not only the cost but the time it takes to implement and train on these technologies.

In your essay, please address, as a minimum, the following discussion points related to the topic using research and examples from your own experience to support your position:

- Identify and describe those Innovative Technology and Project Execution Tools and Techniques that you feel could improve the construction process
- What is your own experience with these technologies, tools or techniques?
- How is the construction industry addressing this issue, and what are the potential advantages and disadvantages?
- What are your suggestions for addressing challenges?
- Discuss the role that an organization such as the AGC might play in addressing issues related to this topic?

Each essay should contain at least (3) three references to support the author’s position. These references should be used minimally to support the author’s unique position, rather than comprise the majority of the essay. You may use any available reference material as a resource, including the Internet, personal interviews with experts in the field, popular magazines, etc. Please use the Modern Language Association (MLA) bibliography format for any works cited:

MAGAZINE & NEWSPAPER ARTICLES
Author. "Title of Article." Title of Periodical Date: First page-last page.

MAGAZINE & NEWSPAPER ARTICLES ACCESSED ONLINE Author. "Article." Periodical Date: First page-last page. Access Date URL.

ARTICLE FROM A REFERENCE BOOK
Author. "Title of Article." Book Title: Subtitle. Editor. Place: Publisher, Date. First page-last page.

WEBSITE OR WEBPAGE
Author. Title. Editor. Date. Institution. Access Date URL. Websites offering “user-generated content” should be noted as such.

Charts and graphical illustrations are welcomed, but should not comprise more than 1-2 pages of the entire essay. Full-color chart and graphs are not required; black and white versions are acceptable. Unless original, chart and graph sources should be supplied.
Faculty Sponsor Checklist

2021 James L. Allhands Essay Competition

Deadline for Submission: November 15, 2020

Complete and return this checklist along with your signed letter on university letterhead verifying the student’s full-time and class status. This checklist verifies that the essay was proofed for grammar and technical errors, is ready for publication, and has not been plagiarized.

FACULTY SPONSOR NAME ____________________________________________
EMAIL ADDRESS _______________________________________________________
COLLEGE/UNIVERSITY ________________________________________________
DEPARTMENT _________________________________________________________
CITY/STATE/ZIP _____________________________________________________
TELEPHONE NUMBER _________________________________________________
NAME OF STUDENT ___________________________________________________

• Student’s essay has been proofed for grammar and technical errors and is ready for publication.
• Student’s essay follows award guidelines and is of no more than ten (10) total pages including charts and graphs.
• A 100 word abstract (not counted in the ten (10) page limit) is included.

Signature ___________________________________________________________ Date _____________