



Project Ideas

- Structural Engineering
 - Bridge shapes – which hold the most weight
- Transportation Engineering
 - Map out which local roads have higher volumes of traffic, have these changed over time?
- Geotechnical Engineering
 - What type of soils are in your region? Are these good or bad soils?
 - Compare your region to California, Dubai, etc.
 - Where are the tallest buildings going up – how and why?
- Environmental Engineering
 - When it rains and floods where does the water go? Map it out
 - The Virginia Roads map for bridges lists large culverts also reach out to firms working in the area.

Organizations

Provide Grade School outreach opportunities and resources for educators.

- ASCE – American Society of Civil Engineers
- EWB – Engineers Without Borders
- SHPE – Society of Hispanic Professional Engineers
- NSBE – National Society of Black Engineers
- SWE – Society of Women Engineers
- VSPE – Virginia Society of Professional Engineers

Virginian Peninsula Engineers Council (<http://va-pec.org/>) is a great resource for connecting with local organizations.

What's in Engineering News?

SmartBriefs – A collection of news stories relating to engineering fields.

- ASCE - <http://www2.smartbrief.com/getLast.action?mode=sample&b=asce>
- ACI - <http://www2.smartbrief.com/getLast.action?mode=sample&b=cleaning>

Service-Learning in STEM

Pre-College Interactions, Early Expectations, and Perceived Barriers of First Year Black and Latino Engineering Students. Dika, Sandra L., Miguel A Pando, Brett Q. Tempest & Krystal A. Foxx.

International Service as a Means of Improving Retention of Engineering Students. Tempest, Brett Q., Sandra L. Dika, Miguel A. Pando, & Samuel T. Lopez.

Service Learning: A Bridge to Engineering for Underrepresented Minorities. Farinde, Abiola A., Brett Q. Tempest, & Lisa Merriweather.

Engineering for Development: An International Service Learning Collaboration. Pando, Miguel A., Sandra L. Dika, Brett Q. Tempest, & Marcial Blondet.