



Infrastructure and Society

Evan Kennedy

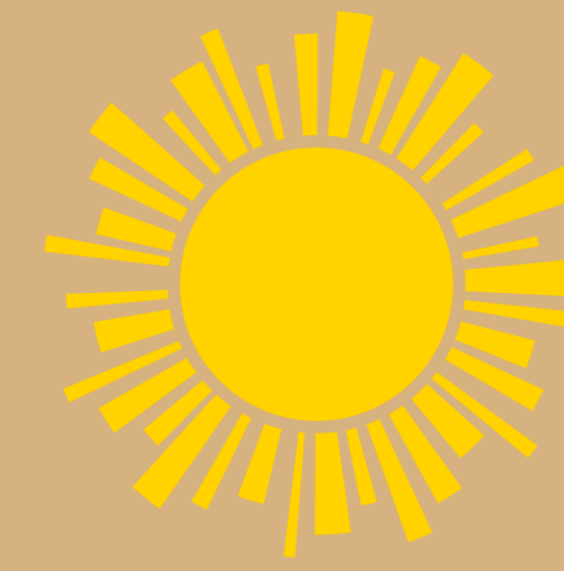
College Park Scholars – Science & Global Change Program

Computer Science

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CPSS340

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Course Overview:

CPSS340 focused on studying the role of infrastructure in society. Such study included discussion and analysis of how both design and maintenance impact infrastructure's value. In addition to instructor led lectures focusing on these infrastructure considerations, me and fellow students were given the opportunity to assist the Maryland Defense Force (MDDF) in evaluating the condition of military infrastructure, following the standard Installation Status Report (ISR) guidelines.

Activities:

- Biweekly lectures led by Dr. Tomblin
- Training sessions with MDDF Engineers
- Practice ISR inspection of UMD campus facility
- ISR inspection of Fifth Regiment Armory
- Create Installation Status Report with peers based on observations made during inspection

Site Condition/Issues:

Built in 1903, having sustained multiple fires, and having largely only received "necessary" repair work over its lifetime, the Fifth Regiment Armory is in a noticeably poor condition, negatively affecting the productivity and quality of life for those performing essential work within its confines. Our task during ISR inspection was to assist the MDDF in identifying issues in both structure and installations

Notable Problems Included:

- Clogged HVAC pipes; impacts heating and cooling systems
- Water damaged ceilings; threatens structural integrity
- Roof design prone to water pooling; creates collapse risk

Impact:

The value of the reports compiled from observations made during the ISR inspection were valuable chiefly as an aid for seeking funding to repair the building. Information from the reports was collected by supervisor Ltc. Beattie and used as supplement for greater reporting on the state of the building, used to appeal for maintenance funding.

Future Work:

As a prospective computer scientist, I find learning about other technical fields valuable, especially through practical means, as I believe multi-disciplinary computer science work is the best way to leverage computer science capabilities for positive impacts.



Picture of Fifth Regiment Armory (site building) taken on day of inspection (above).

Site Description:

Name: Fifth Regiment Armory

Address: 2219 29th Division St, Baltimore, MD 21201

Supervisor(s): Dr. David Tomblin, Ltc. Beattie, Colonel Hubner P.E.



Pictures of damaged site components from inspection. Debris pooling in drainage on roof (top left) and water damaged pipes in basement (top right).

Acknowledgements:

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