

B2D Meeting April 3rd, 2019

Meeting Minutes:

Host: Pierre Fils

Minutes Taker: Cristian J. Aviles-Martin

Research Presentation: RFID-based Crack Detection of Ultra High-Performance Concrete Retrofitted Beams

- Increase in cross-section strength for I-beams in bridges is done by Ultra-high-performance concrete. UHPC is concrete which has incorporated metal fibers.
- RFID chip-based system used to detect defects in the integrity of cross section in beams.
- Signal from RFID chips is processed into a received signal index, which is translated into a damage index used to determine extent of damage.
- Future work is focused on developing a handheld system to detect signals at large distances.

Poster Design Discussion:

- Fellows presented at a glance their scientific posters for critiquing and discussion of design.

Additional Points Addressed:

- Applications to other fellowships or scholarships for first year fellows.
- Supervised teaching requirement for second year fellows.
- Involvement in outreach and mentoring for all fellows.
 - Reminder that all fellows update the spreadsheet with any workshops, mentoring, or outreach that is being done.
 - Fellows mentoring with undergraduate McNair fellows: Jessica Maita, Cristian Aviles-Martin
 - Future arrangement to begin mentoring undergraduate LSAMP scholars is being organized by Aida Ghiaei.
 - Bridge to Doctorate student newsletter meeting will be held on April 10th, 2019.