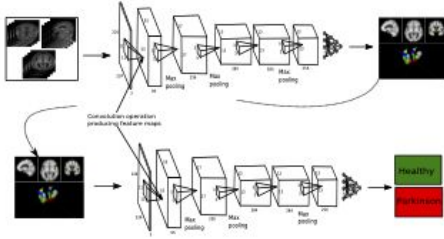




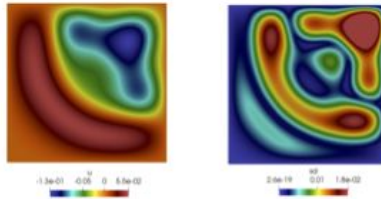
Computational Modelling of Real World Problems Using DRI and Community Outreach

Sudhi Sharma Padillath Vasudevan
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Carleton University,
Ottawa, Canada

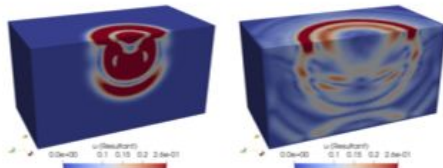
Technical Challenges



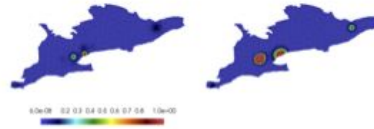
deep CNNs for segmentation and classification



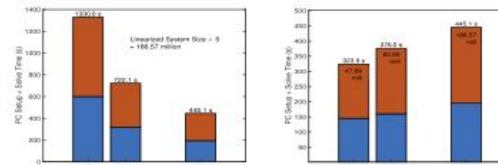
Acoustic wave propagation



3D earthquake wave propagation



Infectious disease modelling



Scalable solver development



High performance computing

Towards an Open Science Leader

Challenge

- Designing and building for understanding
- Designing and building for participation and inclusion

Learning

- ❖ Incorporating feedback loops from users
- ❖ Designing and creating new ideas with contributors and users and allowing contributors to share governance on the project
- ❖ Building project documents, workflows and contribution guidelines
- ❖ Conducting webinars and orientation calls for contributors and users
- ❖ Mentoring and guiding others to being an open science leader

Progress

- ❖ Conducted a DRAC resource awareness webinar to fellow researchers from different university and disciplines and collected feedback
- ❖ Developed an open canvas [Canvas](#)
- ❖ Updated my open source project resource page with detailed README, License and contributor guidelines : [Github](#)
- ❖ Created OSF account for generating DOI and sharing project documents to larger audience : [OSF](#)

Future Work and Open Questions

- ❖ Engaging wider audience through university wide programs and social media outreach
- ❖ How to engage decision makers to create a positive impact on improved accessibility to E-D-I-A groups ?
- ❖ How to create an inclusive collaboration in design and building state of the art digital tools useful for the community ?
- ❖ How to mobilize financial and other resources for successful completion of the project
- ❖ How to effectively create a community of world class science educators and leaders



THANK YOU

Questions/ Feedbacks ?