Agenda

01 Overview
02 CTE Website Project Design
03 Research Project Design
04 Challenges
05 Timeline
06 Next Steps
07 Acknowledgements & References
Project Overview

- **CTE Website**
  - Transitioning pages from current website to WordPress
  - Creating forms to update website
  - Using plugins for website and removing plugins not required

- **Dr. Murali’s Website**
  - Updating appearance of website
CTE Website
Architecture Model for CTE Website

- Home
  - About CTE
    - CTE Departments
    - CTE Leadership Team
  - CTE Interest Form
  - Current Students
  - People
    - Alumni
  - Research
    - Current Research Projects
  - Education & Training
    - Research Opportunities
Age and disease often result in the deterioration of tissues and organs in humans. Although changes in lifestyle and administration of drugs can delay or prevent tissue degradation, organ failure is an inevitable outcome for a large section of an aging population. Surgical transplantation can provide relief in some cases but is not scalable due to the scarcity of viable donors, the difficulty in preventing an adverse immune response, and rising medical costs. An attractive alternative is tissue engineering, a field of research that attempts to create replacements for living tissues and organs.

The goal of the tissue engineering community is to recapitulate organs and tissues that contain several components of native tissues or to design cellular architectures that can be seeded with living cells to form functional tissues. These engineered tissues may then be transplanted to treat human diseases.

**Old CTE Website**

**New CTE Website**
Form Functionality

- CTE interest form
- Filtering posts
- Adds post to list of current students
- Admin forms
Current Students Page

CURRENT STUDENTS

Nastaran Alinezhad
Biomedical Engineering and Sciences | Engineering
Nastaran received her masters degree in chemical engineering from Michigan Tech, where she worked on drug and gene delivery for...

Aditya Bharadwaj
Computer Science | Engineering
Aditya received a B.E. in Computer Science from the Birla Institute of Technology and Sciences, Pilani in India in May...

Amogh Jalihal
Genetics, Bioinformatics, and Computational Biology | Graduate School
Amogh is a grad student enrolled in the GBCB program. He received a B. Tech in Biotechnology from SASTRA University in...
Individual Person's Page

Aditya Bharadwaj

Computer Science

Program: Computer Science
College: Engineering
Year Recruited: 2015
Advisor(s): T. M. Murali

About

Aditya received a B.E. in Computer Science from the Birla Institute of Technology and Sciences, Pilani in India in May 2013. Before joining Virginia Tech, he worked as a Software Engineer at PayPal for two years. His research interests involve Graph Algorithms, Computational Biology and Data Mining. Specifically, he is interested in the problem of identifying potential drug targets, either gene, protein or other biological molecules.
The home page contains an image carousel that cycles through three images. Each image contains a caption with questions related to the CTE program.
The search bar at the side of the page allows for the user to search specific keywords and populates the results to the user.
Research Website
I am a Professor and the Associate Department Head for Research in the Department of Computer Science at Virginia Tech.

I direct the Destination Area on Pandemic Prediction and Prevention. We are a group of faculty members, staff, and students whose vision is to reach an an aspirational destination: A world where we accurately foresee pandemics and proactively minimize their impact. We seek to reach this goal by addressing the grand challenge of uncovering the rules of life that underly virus-host interactions through community-based and ethically grounded research.

I am also the associate director for the Computational Tissue Engineering interdisciplinary graduate education program. I am affiliated with the Interdisciplinary Ph.D. Program in Genetics, Bioinformatics, and Computational Biology.

I joined Virginia Tech in 2003 as an Assistant Professor. From 2001 to 2003, I was a Senior Research Associate in the Bioinformatics Programme at Boston University, where I worked with Simon Kasif. Before joining Boston University, I worked at Compac's Cambridge Research Lab. Till July 1999, I was a post-doc in the Computer Science Department at Stanford University. I worked with Leo Gulseth and Jean-Claude Latombe on problems arising in computational
Updated Research Website

T. M. MURALI

Professor Dept. of Computer Science
Virginia Tech

Email: murali@cs.vt.edu
Phone Number: (540) 231-8534

Office Address: 432 Data and Decision Sciences Building
Mailing Address: 1160 Torgersen Hall
620 Drillfield Drive
Blacksburg, VA 24061

https://wordpress.cs.vt.edu/tmmurali/
Challenges

- Difficulty finding the proper plugins that met functionality required for CTE Website
- Turnaround on downloading plugins
- Finding a way to implement form mapping functionality
Timeline

February
- Met with clients to get high-level understanding of project
- Research about WordPress as CMS, plugins needed

March
- Implemented Research Website
- Implemented bare bones of CTE Website

April
- Finished form functionality, reports, presentation
- Completed Documentation and Testing
Future Work

- Finishing Touches
- Randomization of Spotlighting Students
- Adding CSS elements to CTE Website
Acknowledgments

- Client: Dr. T. M. Murali
- Professor: Dr. Edward A. Fox
- TechStaff: Chris Arnold
References


