

Benevolent Computing

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The Critique



The Response



What is Benevolent Computing?

- Applications which leverage social media, mobile applications, cloud computing and big data to address social needs.
- Systems which leverage new business models to achieve sustainability and scalability.
- A new interdisciplinary research area focused on user-centered design, team dynamics, and open source technologies to create robust solutions for social good.

Academic Pioneers



Benevolent Computing Teaching Goals

- Experience for students in building effective teams and working with clients
- Field work identifying problems and stakeholders
- Research of viable solutions, technologies, and platforms
- Visualizing and documenting research and proposed solutions through a design brief
- Implementing a prototype, with integration and iteration in mind, through publication of source code and a software design document

Project Selection



Team Work



Working with clients



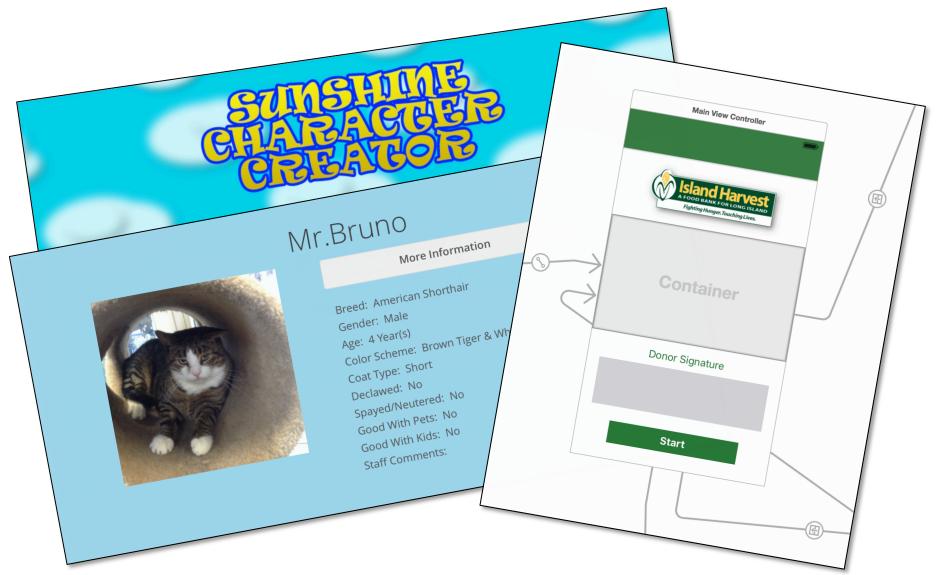
Field Work



Technology



Design and Implementation

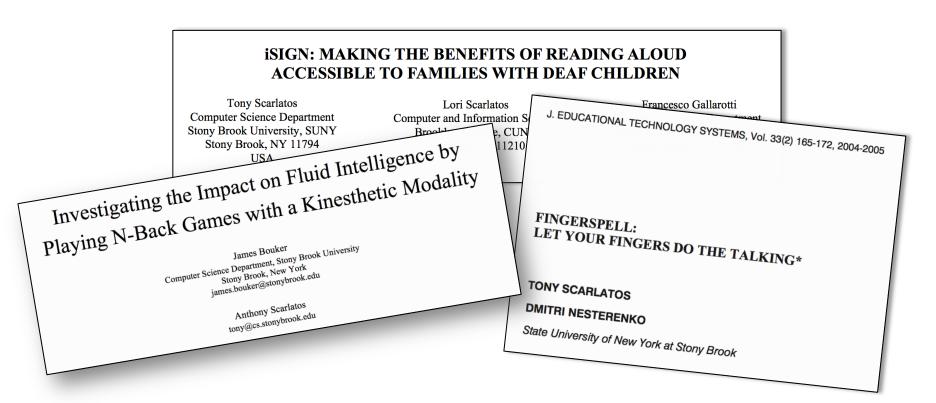


Pilots (ES BOCES, Cleary School)

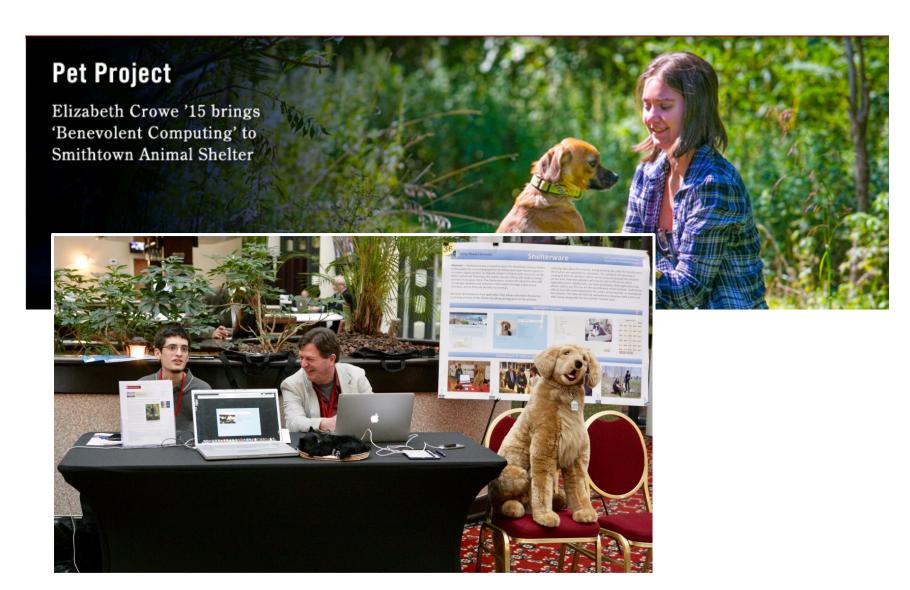


Publications

- IEEE Xplore
- IASTED
- Journal of Educational Technology Systems



Presentations and Press



Reviews

"I wanted to send feedback for this group because they truly went above and beyond for me.

They took their time explaining every detail so I would understand it. Nicole was available by email almost weekly. She helped me with other computer or technology needs like changing adobe files to PDF files so I could redesign our brochure.

The new design of the website is much cleaner and easier for clients to navigate to find what they are looking for. I love the design of the logo which brings the color I was looking for.

I appreciate them working with me after the project to get all the projects onto the site and begin using them all.

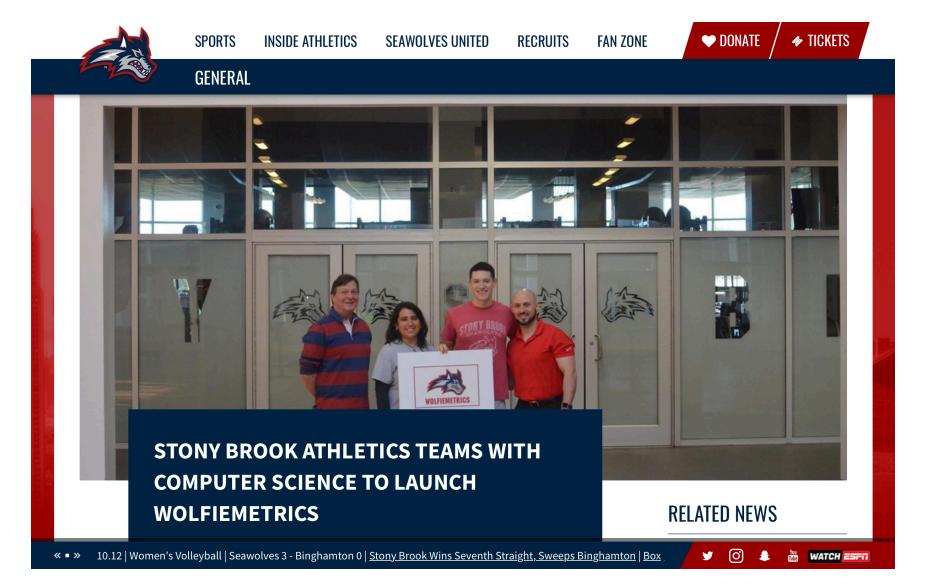
Again, I appreciate all the details, like recognizing all the supporters, designing a logo, setting up the ability to take donations. They listened to my ideas and needs of Sunshine and addressed them.

I appreciated the opportunity to work together with this Team and thank you again for everything.

Sincerely, Carol"

Dr. Carol Carter, Director of Sunshine Prevention Center, Port Jefferson, NY

Current Work



Conclusions

- Benevolent Computing provides students with a rich environment for experiential learning and development of critical thinking skills
- Socially-oriented software development attracts a diverse, interdisciplinary range of students; and challenges them to collaborate with each other, clients, and stakeholders
- Computing for Good projects help rebut the antisocial and unethical stereotypes of CS and engineering students, and provide assistance to local non-profits

Any Questions?



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https://xsrv.mm.cs.stonybrook.edu/c4g/ncsce_talk.pdf

Agencies Served

- Response of Suffolk County
- LI Coalition for the Homeless
- LI Harvest
- Sunshine Prevention Center
- EAC
- This Machine Feeds
- Long Island Against Domestic Violence
- Boy Scouts of America
- Toys of Hope
- Global Innovation Team
- Smithtown Animal Shelter
- Cleary School for the Deaf

Select industry and non-profit links

Google.org

https://www.google.org

Code for America

https://www.codeforamerica.org

MobileActive

http://www.mobileactive.org

Sahana Software Foundation

https://sahanafoundation.org

Engineering for Change

https://www.engineeringforchange.org/category/information-systems/

Games for Change

http://www.gamesforchange.org

Academic Links

Georgia Tech's Computing for Good Program https://computingforgood.wordpress.com

https://bitsofgood.org

https://www.networkworld.com/article/2270704/applications/computing-for-good--web-technology-to-solve-human-problems.html

Stony Brook University's Benevolent Computing Program https://xsrv.mm.cs.stonybrook.edu/c4g/

https://www.stonybrook.edu/magazine/2018-winter/computing-for-social-good

Select Project Links

Shelterware

https://xsrv.mm.cs.stonybrook.edu/c4g/shelterware sbu feature.pdf

Sunshine Prevention Center Web Site:

https://www.sunshinepreventionctr.org/

Response of Suffolk County Call Data Visualization:

https://xsrv.mm.cs.stonybrook.edu/c4g/response_stats.pdf

Select Project Links

iSign (Cleary School for the Deaf):

https://xsrv.mm.cs.stonybrook.edu/TS/research/iSign/iSign.html

iSign IASTED paper:

https://xsrv.mm.cs.stonybrook.edu/ publications/iSign_IASTED.pdf

Select Project Links

SBU World Trade Center Health Program

Tech Report:

https://tr.cs.stonybrook.edu/tr/sbcs-tr-2017-6

Oral history videos and transcripts:

http://130.245.140.252:8080/engage/ui/

index.html