TEC
Technical
Entrepreneurial
Community

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The Technical Entrepreneurial Community

Social Networking & Venture Recruiting Service

Presented by

Jerrid Matthews

President, Technical Entrepreneurial Community

TEC Technical Entrepreneurial Community

"… to create a culture of <u>entrepreneurship within the technical community</u> of UCLA by offering seminars on entrepreneurial education and creating an environment for students to <u>discuss, network, educate and start companies</u>"

Imagine → Learn → Connect → Act

Our Goal This Year

To create programs that help student teams to create startups!

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Dreamers Lab

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Program Overview

- Provide comfortable setting for like-minded entrepreneurial students across all majors to connect and explore venture ideas around a single topic of interest

Project Description

- Develop a *Social Networking & Venture Recruiting Service* for entrepreneurial minded UCLA students to showcase their skills and projects, connect with others, and join business ventures
  - ie: Engineer, Lawyer, MBA, etc

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ENTREPRENEUR

ENTREPRENEUR inside

👁 Thinktank

Welcome to the Thinktank Recruiting Service
To the Dreamers at UCLA

Consider the following scenarios:

- You have a vision and need a team to make it real
- You have skills that you wish to bring to a team
- You'd like to meet others who resonate with your passions

If any of the above is true, Thinktank will provide the environment and resources where student entrepreneurs can take the first step toward turning their ideas into reality: assembling a team. You can find at least one co-founder who'll get your back in times of need, celebrate your first round of fundraising, and pop the champagne at your IPO!

Email

jim@acc.com

Password

[Sign in]

New member sign-up

👁 Thinktank   Home   Account ▾   Ventures ▾   Co-founders ▾   👤 Welcome Jerrid   ▾

Update ventures

Update co-founders

Welcome to the Thi[nktank Recruit]ing Service

Update skills needed

Congratulations, you have successfully started [ ] moment this is the default page, feel free to modify it to either redirect to a
controller or display whatever content you may [ ] s that are currently deployed in this application, click on each to execute its
default action:

Update specializations needed

Find a venture

Project Lead: Jerrid Matthews <matth122@ucla.edu>

Technology Requirement
- GRAILS MVC Development Framework
  - Java and JSP based

Ultraviolet Guardian (UVG)
Estimating the Pedestrians Ultraviolet Exposure before Stepping Outdoors

Presenter
Jerrid Matthews

Network Research Lab
Computer Science Dept.
University of California, Los Angeles

Motivation - Skin Cancer

Accomplished Works

- *"A wireless embedded device for personalized ultraviolet monitoring,",* BIODEVICES, 2009

- **"Ultraviolet guardian – Real-time Ultraviolet Monitoring: Estimating the Pedestrians Ultraviolet Exposure before stepping Outdoors.", MobileHealth, 2012**
  - **UCLA Provisional Patent has been Filed**
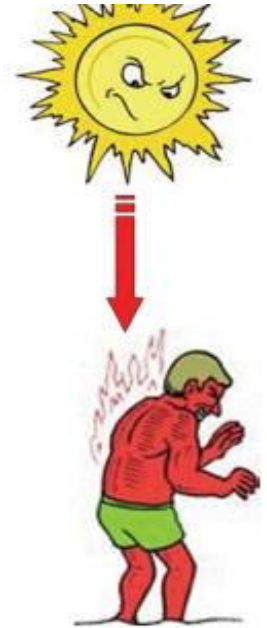
Skin Cancer

- Sun over-exposure protection and skin cancer prevention

- Basal and squamous cell are least severe and make up 95% of all skin cancer occurrences

- Melanoma is the most dangerous and causes 75% of skin cancer related deaths

Reference: Center for Disease Control and Prevention, *"Dengue in tropical and subtropical regions"*

Problem - Personal UV Monitors

Pros

- Some store cumulative UV exposure history as user travels outdoors

- Some give a recommended time to remain outdoors before over-exposure

Cons

- Exposure estimation algorithm assumes pedestrian is in direct sunlight

  - Environmental properties (e.g., trees, buildings…) are neglected

  - No solution on the market estimates pedestrian UV exposure along a path before stepping outdoors

Goal of UV Guardian (UVG)

- Recommend pedestrian travel routes that minimize UV exposure within reasonable deviation of the optimal route

- Estimate pedestrian's UV exposure traveling a path before stepping outdoors by leveraging crowd sourced UV irradiance sensor information

Premise of UV Exposure Model

- A user makes a trip on a sunny afternoon
- Given *start* and *end* destination, time and, current location, pedestrians' UV exposure is estimated with respect to the path and walking speed
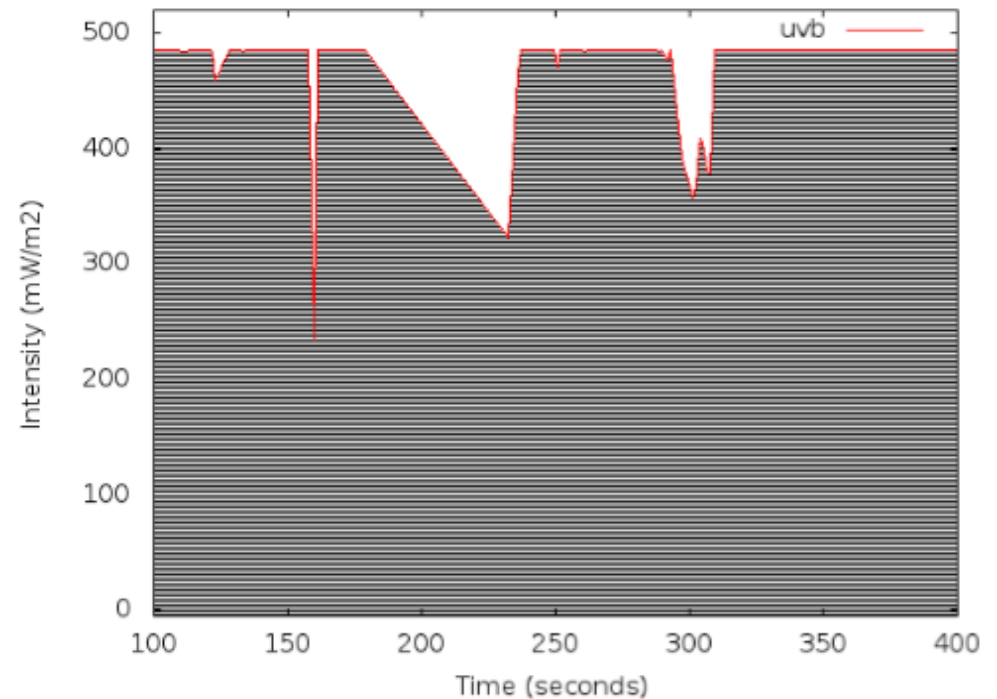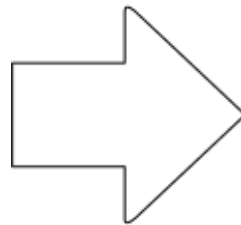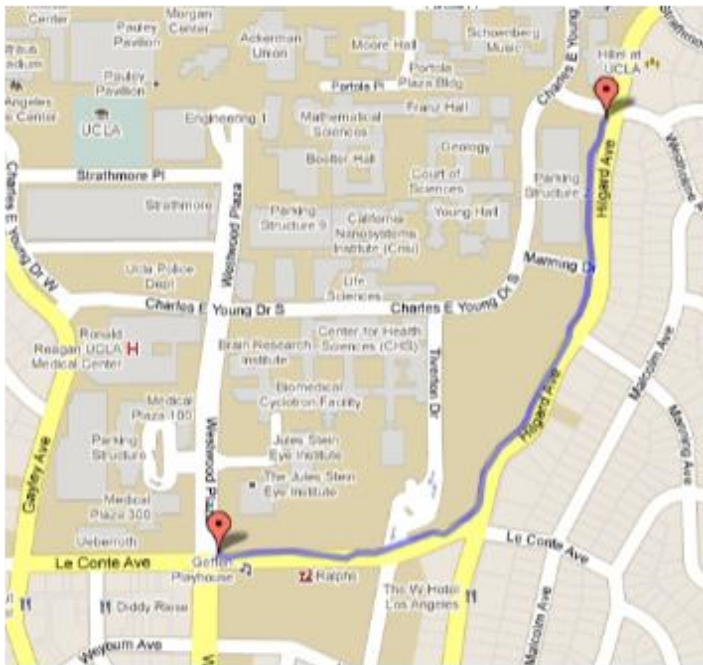
Some of the Work Items

1. Develop graphs to display daily, weekly, monthly UV exposure history on Android app
    a) Avg. time outdoors per day
    b) Cumulative UV exposure per day, week, month, etc
2. Develop GPS path tracking
    a) Simulate UV irradiance measurements taken using measurement dataset
        a) Do not yet have a UV irradiance sensor
    b) Estimate UV exposure with respect to tracked travel path
3. Display real-time UVI using Bluetooth enabled sensor, along with recommendations

Administration

Project Lead: Jerrid Matthews <matth122@ucla.edu>

Technology Requirement

- Java Android SDK for Mobile App Development
- Javascript Processing framework for UV Index Sensor

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Thank You

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*"People who never take risks …
end up working for those who do."*

Website: <u>www.tecbruins.org</u>   Facebook: <u>http://facebook.com/UCLA.TEC</u>