11/25/2018

Contribution Report

CMSC 495 Current Trends & Projects in CS

Group 1 – Team <3 AI

Deograstius Kalule, Jeffrey Liott, Timothy Patat, Jon Simmons, Andrew Young

Contribution Report

Jon Simmons

- Completed design plan, project plan, test plan and user guide documentation
- Downloaded and converted available EKG data into a usable format using custom Java code
- Developed Android Live EKG charting and heart rate code, including mock data
- Developed Android historic EKG and history list activities, including mock data
- Fixed Android navigation and added other activity code as needed

Deo Kalule

- Created complete Android skeleton project
- Researched Android integration with AWS
- Created improved Android mockups
- Added Android History, Login, Sign Up and Rhythms activity screens
- Improved Android navigation display and added a Rhythms menu

Jeffrey Liot

- Developed machine language algorithm and Python code specific to our use case, already running at over 90% accuracy in condition detection using available data
- Created Python EKG ML API documentation for his code
- Finalized an expanded architecture diagram
- Started backend integration work with AWS
- Started machine learning model migration

Andrew Young

- Put together a working EKG device using Raspberry Pi and the various components.
- Improved refining data to reduce noise
- Researched data migration issues
- Created hardware schematics for the project
- Created working breadboard prototype

Timothy Patat

- Developed an API for data transfers
- Working with other members to tie the pieces together into AWS
- Developing AWS services and requirements
- Developed rule set and associated Lambdas
- Created topic channel for device control
- Created new milestones Gannt chart