Now Hiring
2020
Summer Interns

This work is funded by Department of Defense’s Defense Threat Reduction Agency (CB10190).

PNNL will host a mobile application development competition to foster novel and creative approaches for countering biological and chemical weapons of mass destruction. Intern teams will be responsible for identifying the target user and usage scenarios. Once identified, teams will build machine learning and statistical models that support their hypotheses, as well as design and develop the application.

How to Apply
Apply @
https://pnnl.jobs/jobs/
Search for:
310068 – Senior undergrad
310070 – Masters
310071 – PhD

More Questions?
Contact Lauren Charles @
lauren.charles@pnnl.gov

We are looking for people who have backgrounds in

- Software engineering
- Android development
- Human-computer interaction
- Data science/Machine Learning
- Mathematical modeling
- Statistics
Past Competition Summary

In the competition’s 6th year, teams competed to develop the best machine learning algorithm for predicting diseases at various locations as well as creating an innovative mobile app that portrays a user’s risk of disease using model predictions.

Bosch Deployer

Bosch Deployer is a travel planning application that focuses on providing deep insights and in-depth breakdowns of current and future risks faced by 21st century warfighters, who may be called upon to deploy at a moment’s notice to dangerous locations around the globe.

BIOSIM

BIOSIM is a powerful biosurveillance application that aids travel to unfamiliar territories. The tool enables the user to plan a route through different geographic regions and forecasts the user’s risk for infectious disease threats in these regions.

GRID

PreCon GRID, Global Risk of Infectious Disease, is an application showcasing a novel infectious disease forecasting approach utilizing cutting-edge machine learning techniques in the prediction of disease prevalence.

In the competition’s 5th year, the teams focused on mobile application development for location-based infectious disease threats, aerosol release threats, and computer vision-assisted threat detection.

Aerosolve

Aerosolve is the Android application to reduce, if not eliminate, exposure to toxic aerosolized agents. This application gives users the ability to predict the movement of an aerosolized agent at any point in time up to 24 hours after release.

PocketAID

PocketAID, a travel companion for infectious disease education and decision support. This application gives you the ability to formulate situational risks offline, anywhere in the world, to prevent yourself and the community from infectious diseases without carrying a heavy book around.

VisionDX

This Android app is developed medium for taking real-time view and snapshots to detect anomalies unique to infectious diseases. The innovation employs the function of custom made camera features as a core exclusively for detecting diseases from human faces captured with phone camera.