Greetings,

Pacific Northwest National Laboratory (PNNL) is seeking ambitious, high caliber candidates for assignments within the National Security Internship Program (NSIP) for an Innovative Chemical-Biological Threat Reduction Mobile App Competition Internship.

PNNL will host a mobile application (app) development competition to foster novel and creative approaches for countering biological and chemical weapons of mass destruction (CWMD). Intern teams will be responsible for identifying the target user and usage scenarios, as well as design and develop the application. Interns will be encouraged to leverage and adapt existing algorithms, models, tools, and other methods to support the analytic needs of the target users. Over the course of the 10-week program, each intern team will develop and produce a fully functional, tactical decision support aid, Android application. The experience will include mentorship from various field-related experts along with networking and exposure to working in a national laboratory environment with governmental sponsors. At the conclusion of the program, a panel of domain experts will judge the intern apps and the winners will be awarded. The competition will be managed to provide both a positive educational experience for the interns as well as a high-quality software product.

PNNL will organize, provide support, and guidance for a solid design and implementation process. Teams will be chosen to contain a suitable representation of experience, including software engineering, human-computer interaction, data science, epidemiology, and mathematical modeling and simulation. Additionally, interns will exhibit a strong desire to work collaboratively in a team, think creatively, and effectively communicate and present their ideas.

If you are looking to make an impact to the real world during your summer internship, this is your opportunity. Interns will have a chance to solve the real-world problems with direct feedback from target users. The selected app will be further developed and deployed for use by the target users.

Applications are accepted here:

Undergrad intern - https://careers.pnnl.gov/JobOpeningId=308589
Masters intern - https://careers.pnnl.gov/JobOpeningId=308590
PhD intern - https://careers.pnnl.gov/JobOpeningId=308591
Some information on previous competitions can be found here:

- [https://www.dvidshub.net/publication/issues/41990](https://www.dvidshub.net/publication/issues/41990)
- [https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6087951/](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6087951/)
- [https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6088072/](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6088072/)
- [http://europepmc.org/articles/pmc5462221](http://europepmc.org/articles/pmc5462221)
- [https://www.youtube.com/watch?v=HVIy1bWt29Y](https://www.youtube.com/watch?v=HVIy1bWt29Y)
- [http://news.iupui.edu/releases/2015/02/informatics-student-app-flu.shtml](http://news.iupui.edu/releases/2015/02/informatics-student-app-flu.shtml)
- [https://www.youtube.com/watch?v=ZCsiwI4uJ3g](https://www.youtube.com/watch?v=ZCsiwI4uJ3g)

Positions are located in Richland, WA with the competition beginning the week of June 10, 2019.

Current Application Deadline: 02/17/2018

**Minimum Qualifications**
U.S. citizenship is required.

For Undergraduate Students:
Candidates must be degree-seeking students at an accredited college or university.
Candidates must be taking at least 6 credit hours and have an overall GPA of 3.3.
Candidates must be enrolled as a Senior status.

For Graduate Students:
Candidates must be matriculated/enrolled in a PhD or Master's program at an accredited college or university. Minimum GPA of 3.3 is required.

**Preferred Qualifications**
Android application development
Software engineering / computer science
Data science
Epidemiology / Biostatistics
User Experience Design

Please feel free to reach out to me if there are additional questions.

Sincerely,

Lauren Charles, DVM, PhD
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Assistant Professor, WSU Paul Allen School for Global Animal Health

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**Collaboration | Creativity | Courage | Integrity | Impact**