Natasha Singh

Software Engineer + UX Designer

1229 South St. Apt B
Philadelphia 19147
nks27@cornell.edu
484-620-6937

EDUCATION & SKILLS

Cornell University 2009, 2012

M.Eng. Systems Engineering (Product Management)
B.Sc.   Electrical & Computer Engineering

Computer Languages

Python, Java, VizScript, MATLAB,
HTML/CSS/JavaScript (learning), C++ (some)

Software & Platforms

Vizrt platform (~game engine), MongoDB, pymongo, Python web micro-frameworks (Bottle, Requests), Git, Django, SQLite, MySQL, JEE, Adobe Illustrator

Windows, Android, Linux, Arduino

US DoD Secret Security Clearance

EXPERIENCE

Lockheed Martin

MissionXplorer (MX) – Product Lead & SW Engineer   Moorestown, NJ   2014 - Now

A warsim app for building, simulating and visualizing complex Navy operations spanning sea, air, space, & land.

- Led team of 4 engineers to build prototype that went viral within LM, receiving $800K+ of internal funding.
- Designed and implemented MongoDB database, CRUD APIs, and lightweight web services (Python).
- Led UX – designed and implemented a 2D/3D multi-touch UI (VizScript), conducted stakeholder interviews and user studies with domestic and international Navy personnel (admirals, captains, and officers).
- Launched beta MX. LM currently evaluating MX as potential new frontend for Navy simulation products.
- Received 2 company special recognition awards (2014, 2015) for new product innovation.

Surface Navy Innovation Center (SNIC) - Software Engineer   Moorestown, NJ   2012 - 2015

A new rapid prototyping lab that helps the US Navy innovate and speed up insertion of new capabilities into fleet.

- Developed a Google Glass heads-up display for ship combat operators, alerting them of ship status changes.
- Helped establish the SNIC mission, build, and train the pilot team of software engineers.

NATO Maritime Situational Awareness – Software Engineer   Moorestown, NJ   2013 - 2014

Web app helps NATO maritime operators discover suspicious ship behavior to prevent drug trafficking, piracy, etc.

- Wrote proposal and won funding ($100K+) to design and develop software prototype (Django, JavaScript)

Engineering Leadership Development Program (ELDP)   NY & NJ   2009 - 2012

Selected for a competitive rotation based leadership program. Earned master's degree over 4 rotations.

- **Rotation 4** – Technical Assistant to CTO of LM Advanced Technology Labs. Functioned as venture capitalist – evaluated R&D proposals, advised CTO on which projects should be funded, & managed $5M portfolio.
- **Rotation 3** – Developed Java client-side UI and SOAP web services for electronic warfare application.
- **Rotation 2** – Implemented an auto-focusing image algorithm for a tunnel detection radar using MATLAB.
- **Rotation 1** – Wrote signal analysis scripts to determine if ship self-noise is vulnerable to detection underwater.

Cornell University

ECE Design Engineer, JointSafe Project   Ithaca, NY   2009, 2012

- Worked with 1 student to design and develop a wireless body sensor system for hip replacement rehabilitation.
- Developed an Android application to receive and display motion data from JointSafe system via Bluetooth.
- Received 2 ECE Director's Technology Awards for novel concept and ingenuity in JointSafe project.

Recent Projects

Web Developer, Personal Website   Philadelphia, PA   2016

- Building a personal website in order to learn HTML, CSS, JavaScript, Bootstrap 3 and responsive web design.
- Visit www.natashasingh.me