

Baokhanh Karen Tran

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EDUCATION

Virginia Polytechnic Institute and State University | College of Engineering

Expected Graduation: May 2023

B.S Computer Science, Minor in Human Computer Interactions

GPA: 3.70/4.00 (Dean's List since Fall 2019)

PROFESSIONAL EXPERIENCE

Software Engineering Internship – Textron Systems Sterling

Summer 2022

- Remodeled live stream web application with open source/third party integrations and cloud native services, Flume, to support internal hosting deployments of SeeGEO demo through implementation of config file using nestjs, angularjs, MongoDB, Postman, and Docker
- Improved intuitive interface and experience by specifying available stream locations to shortcut the user's end process
- Implemented system health user interface that updated CPU, memory, and disk space to help locate resource allocation
- Worked in an agile/scrum development environment using Microsoft Azure and GIT for code reviews and sprint planning

Software Engineering Internship – Lockheed Martin Manassas

Summer 2020 & Summer 2021

- Designed various displays/web pages for Canada Victoria Command and Control System using QT, SceneBuilder, HTML, and CSS
- Developed messaging functionality for the system using Java, JavaFX, and C++ to provide clearer immediate feedback to the user
- Updated the user interface dynamically with validated data input fields to conform to system requirements and prevent error bounds
- Created user interface to support multiple file selection upload with front-end file management to improve user usability
- Worked in an agile/scrum development environment using Jira, GIT, and Gerrit for code reviews and sprint planning

Undergraduate Computer Science Teacher Assistant – Virginia Tech Computer Science

January 2021 – Present

- Provided one-on-one mentorship to 250+ students with their programming problems and their course work primarily in Python, MySQL, HCI wireframes and storyboards, CTFs
- Facilitated students' intermediate knowledge of python, broad range of heuristics for problem solving, and software development tools
- Assisted new professors and teaching assistants of the previous class structure and grading rubrics and lead classes in their absence

PERSONAL PROJECTS

Women In STEM – Python, Flask, HTML, Bootstrap & CSS

- Hacks of Kindness Best UI/UX design (October 2020) is an interactive website showcasing the accomplishments of women in STEM

Geographical Information System – C

- Designed a system which built and maintained several in-memory index data structures and supported the retrieval of GIS records read and parsed from a file input using regular expressions
- Implemented test driven development by creating unit test cases for multiple classes to fulfillment system requirements

Covid Spread Visualization – Java

- Displayed the number of cases or deaths in the US by state and the country as a whole on an interactive user interface
- Developed multiple Java object oriented classes that used abstraction, inheritance, and encapsulation

Created my own Binary Tree, Double Linked List, Linked List, Quadtree, Queue, Skip List, Stack Class – Java

Created my own ArrayList, HashTable, MIPS32 Assembler – C

EXTRACURRICULAR ACTIVITIES

Graphic Design Officer – Virginia Tech HackViolet

May 2021 – Present

- Working with 13+ women to put on the 48-hour Hackathon, working with over a dozen companies and hosting 1,000+ attendees
- Curated various social media posts for our Instagram, Facebook, and website using Adobe Illustrator and Canva

Computer Science Department Ambassador – Virginia Tech Computer Science

August 2021 – Present

- Assisted and informed 100+ new and prospective computer science students at Virginia Tech through table events and open houses
- Attended monthly meetings representing the major and provided insight into student life at department meetings

SKILLS

- **Programming Languages:** Java, Java Swing, JavaFX, Javascript, Python, C, C++, Bash shell, Node.js, Nest.js, HTML/Bootstrap, CSS, Angular, R, MATLAB
- **Tools:** Git, Gerrit, Docker, MongoDB, Postman, MySql, Eclipse, Visual Studio Code, Microsoft Azure, Jira, MS Office