Hamzah Nizami

Email: hamzahanizami@gmail.com
Website: http://www.hnizami.me/
Github: github.com/hniz
LinkedIn: linkedin.com/in/hamzah-nizami/

Education

Stevens Institute of Technology Hoboken, NJ
Bachelor of Science in Computer Science; Minor in Mathematics. GPA: 3.78 *2018 - 2022*

Courses: Algorithms, Data Structures, Systems Programming, Programming Languages, Discrete Structures, Automata and Computation, Computer Organization and Programming, Software Development Processes

Organizations: President of DuckHacks Hackathon Committee, Professional Development Chair of Society of Asian Scientists and Engineers, Member of Indian Undergraduate Association

Honors: Dean's List, Stevens Pinnacle Scholar, Presidential Scholarship

Experience

- **Synopsys** New York, NY
  Software Engineering Intern *May - August 2020*
  - **Utilized:** Python, Flask, Git, Jupyter Notebook, Google Cloud, Kubernetes, Tensorflow, SKLearn, Keras, Burp
  - Spearheaded the creation of a web application that utilizes machine learning to detect possible phishing attempts by verifying the author of a text with 90% accuracy.
  - Improved web application functionality by utilizing natural language processing techniques to detect malicious URLs with 92% accuracy.
  - Evaluated the benefits and drawbacks of several machine learning techniques such as Bayesian Classifiers, Logistic Regression, and Neural Networks in the context of improving the accuracy of the web application.
  - Investigated and reported security exploits found in client web applications during penetration testing assessments.
- **Stevens Institute of Technology** Hoboken, NJ
  Undergraduate Course Assistant for CS115: Introduction to Computer Science *January 2020 - Present*
  - Hosted weekly labs and office hours to aid with assignments, as well as reinforce concepts such as programming fundamentals, recursion, and algorithmic thinking.
  - Collaborated with professor and other CAs to ensure consistent and fair assignments, exams and grading schemes.
- **Synopsys** New York, NY
  Software Engineering Intern *May - August 2019*
  - **Utilized:** Java, Burp, Git, Docker, Python, Jira, Maven, JUnit
  - Coordinated with an international team to design and develop an internal tool that automates passive finding report generation for security consultants.
  - Designed and implemented a robust backend architecture using ETL principles and object-oriented programming.
  - Optimized application performance by 93% by reworking request handling, thus taking the application execution time from 2 minutes to less than 10 seconds.
  - Collaborated with beta testers in Bangalore, Bloomington, and New York City to launch stable releases and remediate bugs.
  - Authored precise documentation to aid future engineers in maintaining the product.
- **CyberCentric** New York, NY
  Software Engineering Intern *June - September 2017*
  - **Utilized:** Python, Burp, IBM App Scan
  - Built web scrapers using Python libraries such as BeautifulSoup and Selenium to find thousands of potential clients.
  - Remediated software bugs on the company's website and pioneered a Search Engine Optimization campaign to increase visibility.
  - Created a video describing XSS attacks and how to prevent them for company developers.

Skills

- **Languages** Python, C++, Java, C, OCaml, HTML, CSS, Javascript, ARMv8
- **Technology** Google Cloud Platform, Burp, Flask, Kubernetes, Raspberry Pi, JUnit, Maven, Docker, LaTeX
- **Tools** Git, Github, Vim, bash, Linux, macOS, Windows, Jupyter Notebook, Tensorflow, SKLearn

Projects

- **echo** (Stony Brook Hackathon): Language learning application that uses natural language processing to compare inputted user speech data with native speaker speech to give tips on how to improve. *Tech*: Python, Kivy, Google Cloud Platform. (September '19)
- **ca-bot** (Personal Project): Collaborated on development of a Discord bot that queues students and notifies the instructor when a student is awaiting help during virtual office hours for the Stevens Computer Science department. Utilized test-driven development for high code quality, maintainability, and scalability. *Tech*: NodeJS, Jest, Git/Github, Google Cloud (In Progress)
- **Facial Recognition Door Unlock** (Personal Project): Used a reverse engineered Ring API and facial recognition technology to unlock a door if they are a homeowner without the need for a key. *Tech*: Python, C++, Arduino, Raspberry Pi. (In Progress)