Ashish Shrestha [stylized Aasys Sresta]

SOFTWARE ENGINEER | COMPUTER ENGINEER

508 N. 32nd Street, Philadelphia PA 19104 | (267) 521-2797 | official.aasys@gmail.com | aasys.io | github.com/Aasys

Education

Drexel University   Philadelphia, PA

M.Sc. in Computer Science

B.Sc. in Computer Engineering (Dual Degree Program)

Current GPA: 3.45   Anticipated Graduation - June 2018

Experience

Sift Security   Philadelphia, PA

Security Research Engineer   March-September 2017

* Developed vulnerability and security incident detection algorithm like insider threat, time-based anomalies, user usage pattern using machine learning

* Built integration services for with third party services like CarbonBlack, ServiceNow, Splunk running on AWS EC2

* Created a Docker based framework for sandboxing execution of user-uploaded scripts

Dell Inc. (Boomi Master Data Management)   Berwyn, PA

Software Development Engineer   March-September 2016

* Worked as developer for Dell Boomi cloud-based Master Data Management (MDM)

* Developed various new features for MDM platform, some including smart collection storage, data filtering

* Developed Mobile web application for Boomi MDM Platform

* Experience with front-end and back-end development, responsive design, and database design

* Applied machine learning for creating recommendation system to aid users in integration process creation

Dell Inc. (Boomi AtomSphere Integration)   Berwyn, PA

Software Development Engineer   March-September 2015

* Developer for Dell Boomi AtomSphere cloud-based iPaaS

* Experience with agile development, and scrum teams

* Involved in full stack development using Google Web Toolkit

* Worked on AtomSphere runtime containers and connectors

* Automated UI testing using Selenium and Cucumber

Retouch Lab (Drexel University)   Philadelphia, PA

Research Assistant   June 2014- March 2015

* Developed a real-time 3D model rendering application to visualize accelerometers data for research on cutaneous

vibration during whole hand haptic interactions.

* Worked with a graduate student to design and fabricate a cable driven robot to be used in proprioception studies.

* Experience with motion capture systems, motor control, CAD and 3D printing.

Skills

Programming: C, C++, C#, Java, Python, Kotlin, Visual Basic, QBASIC, awk, HTML, CSS, JavaScript, VHDL, MATLAB & Simulink, scripting, NXT-C, Android Development, Racket, Scala, Haskell

Tools: version control (git, svn), SQL, Processing, build tools (make, maven, gradle), .NET, OpenCV, OpenGL, CUDA, OpenMP, Hibernate, Liquibase, Titan graph, gem5, kafka, MQTT, JAX-RS, GWT, Google Cloud Platform, aws, docker, and many more

Applications: Creo Parametric, Solidworks, AutoCAD, Xilinx ISE, Modelsim, Microsoft Office, MySQL, PostgresSQL, Cassandra, Elasticsearch, PSoc Creator, IntelliJ IDEA, Visual Studio

Boards: Raspberry PI, PSoC, Arduino, Dragino, FPGA, Edison

OS: Linux, Windows, MacOS, Android

Projects   [more on http://aasys.io]

Seamless Compute   Kotlin | JS | Java| Python | Scripts | …

A personal project turned senior design, currently under active development. Responsible for – Seamless Compute architecture and technology stack, distributed system architecture for cloud, full stack development, integration of virtualization engines, database management, restful services, embedded systems development, hardware design/development, UI/UX, DevOps, web and data security, networking, tracking progress.

Amilo Bot   C#/Python

Amilo Bot is a Discord Bot that I built for use in my personal Discord server. Some of the services it provides are multi-lingual announcer for voice channel activity, interact with users, detect non-English post and provide translation.

Gitlab2Discord   Python

A simple notifier application written in Python that post events from Gitlab to Discord Server using webhooks provided by both platforms.

Next Gallery   Java | HTML | CSS | JS

A prototype mobile web application for gallery visitors that provides location-based information and interactive content. Additionally, allows users to interact with static displays placed in the gallery.

Open Invite   Android App | Java Server

An android application that allows users to post events on the map and allows people to find local events around them that they can attend.

Hand Synergy Visualization   OpenGL, C#, Data Visualization

Real-time 3D visualization application to visualize energy propagation for research on cutaneous vibration during whole hand haptic interactions.