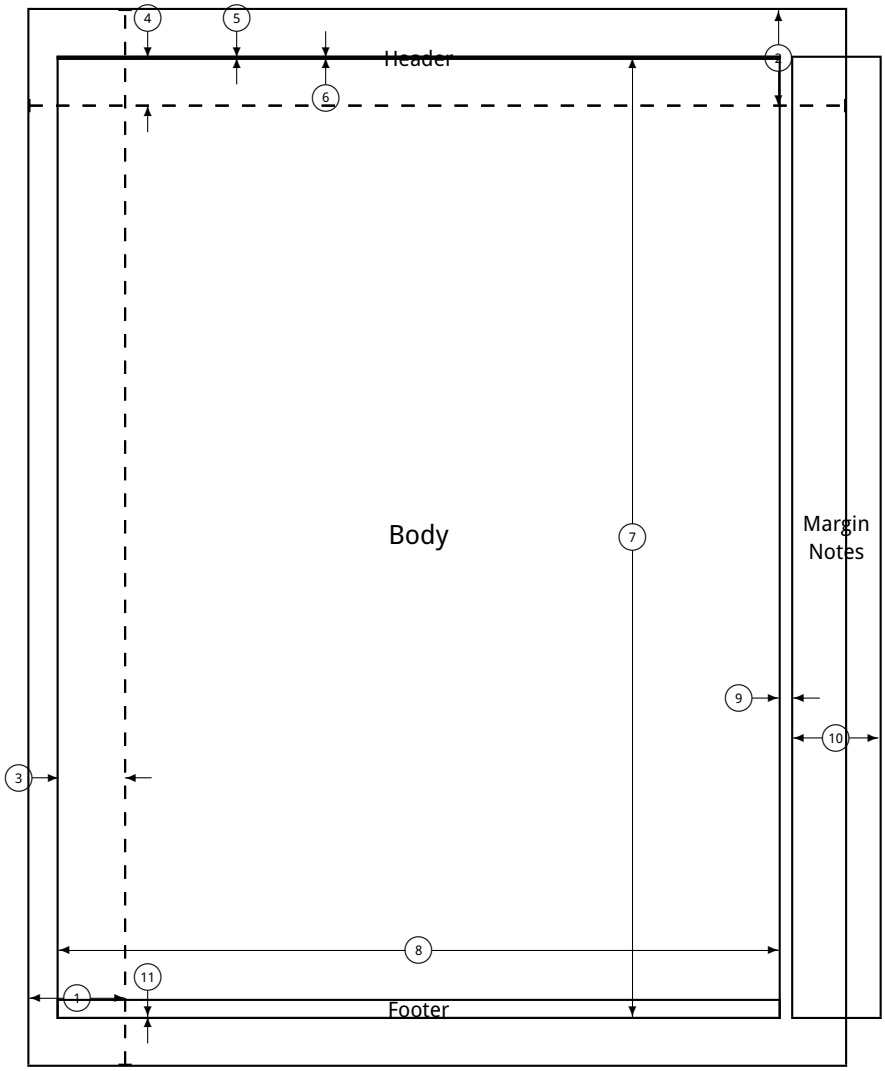

1one inch + \hoffset
2one inch + \voffset
3\oddsidemargin = -50pt
4\topmargin = -36pt
5\headheight = 0pt
6\headsep = 0pt
7\textheight = 722pt
8\textwidth = 542pt
9\marginparsep = 11pt
10\marginparwidth = 65pt
11\footskip = 0pt
\marginparpush = 5pt (not shown)
\hoffset = 0pt
\voffset = 0pt
\paperwidth = 614pt
\paperheight = 794pt

Anwesh Tuladhar

12810 University Club Dr. #203
Tampa, FL, 33612

https://anwesht.github.io/
anwesh.tuladhar@gmail.com
(813)-534-8816

Education

- **University of South Florida** — Tampa, FL
  Ph.D in Computer Science; (Member of Tau Beta Pi) — *January 2016 – Present*
- **Kathmandu Engineering College** — Kathmandu, Nepal
  Bachelor of Electronics and Communication Engineering — *August 2010 – January 2014*

Experience

- **Synopsys Software Integrity** — San Francisco, CA
  Technical Intern — *May 2018 – August 2018*
  - Prototyped a client-side DOM-XSS checker for javascript by tracking possible dataflows through the DOM.
- **University of South Florida** — Tampa, FL
  Graduate Research and Teaching Assistant — *Spring 2016 – Present*
  - **Transportation Security Research**: Conducted a study of the current cyber infrastructure involved in transportation by visiting the Transportation Management Center (TMC) and interacting with the engineers.
  - **USF Security Operations Center (SOC) Research**: Conducted an anthropological study to improve the efficiency of the SOC. Developed automation and network analysis tools. Deployed a honeypot to further our IoT research.
  - **Android Security Research**: Developed a language translator from Argus-Jawa (intermediate language) to Java for Argus-Amandroid.
  - **Teaching Assistant - Graduate Operating System**: Designed course projects for graduate operating systems course based on Yale's mCertiKOS.
- **Deerwalk Services** — Kathmandu, Nepal
  Software Engineer — *November 2013 – December 2015*
  - **Data Analytics**: Developed webservices for medical and financial data analytics and report generation tools in grails with Elasticsearch as the primary backend database and MySql as the secondary database.
  - **Scripting**: Developed file-scanner application using inotify kernel subsystem of Linux and integrated it with the web application. Developed python scripts to synchronize data between web application and accounting software.
  - **Application Deployment**: Deployed web applications on Amazon EC2 servers.
- **Deerwalk Institute of Technology** — Kathmandu, Nepal
  Instructor — *December 2014 – December 2015*
  - **Numerical Methods**: Planned and taught B.Sc IT Numerical Methods practical sessions.

Projects

- **Language Translator**: Developed a language translator from Argus-Jawa (an intermediate language used in Amandroid) to Java. The translation was based on heuristics applied to the Argus-Jawa AST and written in Scala.
- **Compiler Design for an Object Oriented Language**: Developed a complete compiler (including lexer, parser, dynamic dispatcher and code generator) for an object oriented language from scratch. Wrote the lexer and parser by hand as well as using flex/bison in C.
- **Graph Data Processing**: Implemented and analyzed a generative model for network/graph generation described in the paper by Sendina-Nadal et al. using NetworkX.
- **VAST Mini-challenge 2017**: Led the team for mini-challenge 1 where we developed a tool what processed transportation sensor data in Apache Spark into a graph and visualized it as a subway map using Processing3 and Tableau. Our team also got an honorable mention for mini-challenge 3.
- **Image recognition using CNN**: Built a convolutional neural network for image recognition using TensorFlow.
- **Yelp Dateset Challenge**: Developed a Spark application using StanfordNLP library to analyse businesses from Yelp dataset based on their user reviews, locations, and user communities.
- **Particle Simulation**: Optimized a simple serial particle simulator using 3 different techniques: OpenMP, MPI and GPU in the Stampede super computer as a part of Parallel and Distributed Systems course.
- **Accelerometer Based Glove Mouse**: Designed and implemented an accelero-meter based glove mouse using AVR and ARM based microcontrollers. Used AVR studio and Arduino Sketch IDEs for the same. This project was selected for demonstration at the Army Technical Expo.

Technical Skills

Programming	Java, Scala, C/C++, Python, ML, SQL, x86, bash, LaTeX, Flex/Bison
Operating Systems	Linux, MacOS, Windows, mCertiKOS
Security Tools	Splunk, Wireshark, Nessus, Metasploit, Nmap
Data Analysis & Visualization	Apache Spark, NetworkX, SNAP, Gephi, Processing 3, Tableau
Development Tools	Git, GNU Tools, Maven, Intellij, Vim
Machine Learning	TensorFlow, Weka, Stanford NLP
Databases	ElasticSearch, MongoDB, MySQL, MSSQL