

JUNWEI FENG

Phone: (631) 805 - 8287 |Email:Junweifeng1214@gmail.com|www.linkedin.com/in/junwei-feng-8a05662b7



EDUCATION

Bachelor of Science in Computer Science

University of South Florida

Tampa, FL

Expected Fall 2026

Relevant Coursework: *Data Structures, Analysis of Algorithms, Automata Theory, Big Data Analysis with Hadoop, Secure Coding, Massive Parallel Systems, Linear System, Discrete Structures, Probability and Statistics, Program Design, Program Concepts, Computer Organization, Computer Logic Design, Formal Languages, User Experience Design, Communication for Engineers.*

PROJECT EXPERIENCES

AES-256 Decryption Program, University of South Florida, February 2025 - February 2025

- Developed a Python program to decrypt an encrypted paragraph using AES-256 in CBC mode, ensuring secure and efficient data recovery with proper formatting, integrity checks, and strict adherence to cryptographic best practices.
- Processed ciphertext, key, and IV from binary files, implemented decryption with PyCryptodome, removed PKCS7 padding, and extracted the original plaintext while maintaining data consistency.
- Debugged decryption issues by analyzing intermediate values, verifying key integrity, and ensuring accurate text output for validation and automated grading, improving overall reliability.

Spatial Distance Histogram Computation, University of South Florida, February 2025 - February 2025

- Designed and implemented a CUDA-based program to compute a spatial distance histogram (SDH) from 3D point data, leveraging GPU parallelism to accelerate distance calculations and optimize memory usage.
- Developed a CUDA kernel to efficiently calculate pairwise distances and update histogram bins using atomic operations, ensuring correct concurrent memory access while handling large datasets.
- Comparing GPU and CPU results, debugging memory access conflicts and optimized data transfers between hosts.

Personal Cloud Infrastructure Deployment using AWS, December 2024 - December 2024

- Designed and implemented a cloud-based web application using JavaScript and HTML, deploying it to AWS (EC2, S3, RDS, IAM) to ensure scalability, security, and efficient resource utilization.
- Configured AWS VPC, subnets, and additional resources to establish the application's infrastructure on AWS.
- Deployed Auto Scaling Groups and Load Balancers across multiple availability zones to ensure high availability, fault tolerance, and performance optimization, minimizing downtime and enhancing responsiveness.

Big Data Processing with Apache Hadoop, University of South Florida, September 2024 - October 2024

- Developed Java MapReduce programs to efficiently process and analyze large-scale ad campaign data in Hadoop, enhancing data aggregation, trend analysis, and performance scalability.
- Imported relational data from MySQL into HDFS using Sqoop for distributed processing and storage optimization.
- Implemented ETL workflows with Apache Pig to clean, transform, and analyze advertising data, identifying cost-effective marketing strategies and reducing processing time.

InkRhythmNail.com, E-Commerce Website, May 2024 – August 2024

- Developed and launched InkRhythmNail.com using Shopify, integrating a custom domain from a third-party provider and configuring DNS settings for seamless website connection.
- Designed and customized a Shopify theme using HTML, CSS, and Liquid, enhancing site responsiveness, navigation, and mobile-friendly UX while optimizing load times and visual appeal.
- Improved product organization, pricing updates, and checkout efficiency for a seamless shopping experience.

SKILLS

Programming & Parallel Computing: C++, Java, C, Python, JavaScript, HTML, CSS, Liquid, CUDA, RISC-V, GPU Computing

Big Data & Cloud Computing: Hadoop, MapReduce, Sqoop, Apache Pig, AWS (EC2, S3, VPC, IAM, Auto Scaling, RDS, CloudWatch, Lambda)

Security & Databases: AES-256, CBC Mode, PyCryptodome, Secure File Handling, MySQL, PostgreSQL

Development Tools & Version Control: Git, GitHub, Visual Studio Code, RARS, VMware, Arduino, PuTTY, WinSCP, MS Office 365

Languages: Native Chinese (Mandarin), English

Soft Skills: Positive Attitude, Time Management, Critical Thinking, Problem-Solving