Naveen Unnikrishnan

Email: naveenunnikrishnan98@gmail.com
https://naveen-u.github.io
Mobile: +91-98470-99907

Curriculum Vitae

U-M ID: 96392722
Computer Science & Engineering M.S.E.
Fall 2024

EDUCATION

Birla Institute of Technology and Science (BITS Pilani)   Pilani, India
Bachelor of Engineering in Computer Science; GPA: 8.88/10   *Aug. 2016 – July. 2020*

EXPERIENCE

Arcesium   Bengaluru, Karnataka
Senior Software Engineer   *July 2020 - Present*

- **Look-through paths in directed cyclic graphs**: Designed and implemented an algorithm to compute product of edge-weights and other aggregations on large directed cyclic graphs of investments and their underlying components to allow clients to identify their net leaf-level investment exposures.

- **Data pipelines and Spark ETL**: Designed and implemented scalable, event-driven data pipelines to integrate Arcesium's data management platform, Aquata, with StatPro, a 3rd-party analytics solution for performance, attribution and contribution, helping Arcesium expand its business to the IAM segment.

- **AWS Migration**: Spearheaded the containerization and migration of key monolithic applications hosted on on-premises servers to AWS EKS, increasing scalability, reliability, and ease of onboarding new clients.

Amazon   Bengaluru, Karnataka
Software Engineering Intern   *Jan 2020 - June 2020*

- **Unification of competitor monitoring configuration pipelines**: Refactored and unified the competitor monitoring configuration pipelines that help improve Amazon's price perception. The unification eased the setup of configurations for internal business users, and the refactoring got rid of redundant steps in the pipeline, improving overall throughput.

Arcesium   Hyderabad, Telangana
Software Engineering Intern   *Summer 2019*

- **Python sandbox for user-defined data transformations**: Improved Arcesium's data parsing and processing pipeline to enable users to perform custom transformations using python in a secure sandboxed environment, using multi-threaded streams to support large input and output loads.

Touchless ID (formerly, Metron Labs)   Bengaluru, Karnataka
Software Engineering Intern - Machine Learning   *Summer 2018*

- **Deep learning models for hand detection, classification, and motion detection**: Created convolutional neural networks for hand detection, classification, and motion detection using Python and Keras as part of proof of concept builds for Touchless ID's camera-based fingerprint authentication system.

PROJECTS

TFTP implementation
Implemented the Trivial File Transfer Protocol (RFC 1350) as part of a course on Network Programming.

Detecting fake accounts on Twitter
Detection of spam accounts on Twitter based on clustering and classification methods as part of a course on Information Retrieval.

Unix chat protocol

Implemented a chat server and corresponding client for a custom chat server protocol as part of a course on Network Programming.

Compiler construction for an LL1 language
Created a compiler (including lexer and parser) from scratch for a language with an LL1 grammar as part of the Compiler Construction course.

Multiplayer real-time game and chat room
Open-source multiplayer web-based game of Codenames with a chat room using socket-io, Flask, and react.

AWARDS & RECOGNITIONS

Kishore Vaigyanik Protsahan Yojana (KVPY) Scholarship by the Govt. of India *Mar 2015*

National Talent Search Examination (NTSE) Scholarship by the Govt. of India *Feb 2013*

TECHNICAL KNOWLEDGE

Languages: C, C++, Python, Kotlin, Java, Typescript, Javascript, Bash, SQL

Technologies: AWS, Spark, Spring Boot, React

Courses: Computer Programming (A, ranked 1st among 500+), Data Structures & Algorithms (A, ranked 1st among 200+), Theory of Computation (A), Computer Networks (A), Database Systems (A-), Network Programming (A-)

EXTRA-CURRICULARS

Teaching Assistant, Data Structures & Algorithms *Jan 2019 - May 2019*

Editor-in-Chief, Cactus Flower, the BITS Pilani literary magazine *Aug 2018 - May 2019*

Coordinator, English Language Activities Society, the BITS Pilani quizzing club *Aug 2018 - Dec 2018*