Dhananjai Senthil Kumar

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EDUCATION

Northeastern University

Bachelor of Science in Computer Science, Minor in Mathematics

- Relevant Courses: Reinforcement Learning, Machine Learning and Data Mining, Algorithms & Data, Object-Oriented Design, Artificial Intelligence, Cybersecurity, Software Engineering, Calculus
- Certifications: AWS Solution Architect, AWS Cloud Practitioner

EXPERIENCE

Software Engineering Intern

Cloud303

• Processed **500**+ **Gb IMDb Data** using PySpark and AWS Glue for ML pipelines

• Automated screenplay analysis via serverless async REST API and LLMs (Langchain)

- Created a Retrieval Augmented Generative(RAG) chatbot for clients on AWS
- Built 2 FullStack Applications using React and Svelte along with **30**+ **REST API endpoints**
- Developed full stack bio-informatics platform to run HPC workloads on AWS Batch via REST API

Founder & CTO

Solis Machines Inc.

- Delivered a seamless high performance computing solution for artists and engineers
- Deploying a multicloud architecture using AWS, GCP, and Azure via Terraform and Kubernetes
- Raised over 5 figures in funding with a team of 4 engineers

Research Intern

University of Connecticut Center for Quantitative Medicine

- Developed and evaluated Agent-Based Models for bacterial simulations in microbiomes
- Co-authored Agent-Based Models of Polymicrobial Biofilms and the Microbiome—A Review

PROJECTS

LotCreator | Next.js, React, Firebase, GPT-4, Git, Google Vision, Selenium

- Automated product appraisal processes from **16 hours to 16 seconds** through computer vision models, scraping agents, and LLMs
- Built an end-to-end full stack application for managing auctions using **MVC design**

rev | Next.js, React, Supabase, PostgreSQL, Git, Vercel, Neo4j

- Founded a hackerspace community of **350**+ members within a semester of operation
- Built rev connex: Used graph databases and embeddings to connect people and projects.
- Led cohort workshops on Firebase and LLMs + Hosted events with notable tech venture capitalists like Cory Levy and Edward Lando

Automated Hydroponic Farm | Streamlit, Python, OpenCV, Supabase, RaspberryPi, Git May 2022

- Automated pH and nutrient levels via RaspberryPi and motors in Hydroponic Farming system
- Trained a Computer Vision model to detect ripe fruit to automate harvesting processes

Nov. 2023 Autonomous Game Agent for Jetpack Joyride | Python, PyTorch, PyGame, Git

• Implemented a genetic algorithm and Deep Q Network to neural networks to play Jetpack Joyride

TECHNICAL SKILLS

Languages: Java, Python, C/C++, SQL, PostgreSQL, GraphQL, TypeScript, JavaScript, HTML, CSS, Rust Frameworks & Libraries: PyTorch, Tensorflow, AWS SAM, OpenCV, Pandas, Numpy, React, Next.js, Node.js, TailwindCSS, MongoDB, Neo4j, Apache Spark, Selenium, BS4, Processing, Langchain Tools: AWS, GCP, Azure, Firebase, Docker, Kubernetes, Git, Postman, Vercel

June 2021 – August 2021

Aug. 2023 - Present

Farmington, CT

Aug. 2023

Boston, MA

Sep. 2021 – May 2025

Aug. 2023 – Present

Boston. MA

Boston. MA

July 2022 – July 2023