

BUNPHENG CHHAY

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EDUCATION

Master of Science, Data Science

Exp 2026

Boston University, Boston, MA

Bachelor of Science, Computer Science

Sacramento State University, Sacramento, CA

AWS Certified Cloud Practitioner, Amazon Web Services: MEMWP59DP2V4Q4C8

SKILLS

Programming & Frameworks: Java, JavaScript, Python, R, CSS, Figma, HTML, Node.js, React, Express, MongoDB, SQL

Cloud & DevOps: Docker, AWS (EC2, Lambda, S3, Amplify, Connect, Lex, IAM, Polly, Rekognition, Sage Maker, SF, CF, API gateway)

Data Science: Pytorch, Plotly, NumPy, Pandas, Scikit-learn, Transformer, LLAMA3, Pinecone, Langchain, Langgraph, Huggingface

Others: Git, Jupyter Notebook, Linux, Jira, Agile, JSON, CSV, XML, Scrum, System Design, Unit Test, CI/CD, Agentic AI

EXPERIENCES

Web Developer, Freelance. [View Client Project](#)

Apr 2024 – Present

- Engage directly with clients to extract and implement requirements, added targeted seasonal promotion result in 40% viewers boost
- Designed, developed, and deployed scalable web app for small business clients using MERN stack, AWS Cloud, and leverage Google Analytics to track user engagement, achieving 35% boost in event counts, 6% rise in active users and 8% increase in new users
- Automated deployment CI/CD with AWS Amplify and GitHub, and configured Domain Name System (DNS) and routing with Route 53

Associate Solutions Architect Intern, Amazon Web Services (AWS), Seattle WA

May 2022 - Aug 2022

- Managed two end-to-end projects, developed and deployed AI/ML and chatbot projects, including a project featured at **AWS reInvent**
- Identified core business requirements, developed AWS reference architecture, POC Solutions, cost projection and optimization
- Architected cloud based solution using AWS Step Functions, S3, Lambda, API Gateway, Polly, Lex, Connect for real-time solutions
- Built an event driven architecture and AI/ML workflows using computer vision, NLP, and text-to-speech, solving complex user needs
- Monitored API applications and AWS resources with CloudWatch, CloudTrail, X-Ray, AWS Billing and Cost Management
- Deployed cloud infrastructure covering frontend (React), APIs backend (Node.js, Python), data storage, security, and monitoring
- Assisted in customer projects, providing research and reports on data migration, security, and CI/CD pipeline improvements

Assistant Operation Manager, TLBU Foundation, Atlantic City, New Jersey

May 2016 - Aug 2017

- Supported customer relations by addressing inquiries, resolving issues, and ensuring high satisfaction levels
- Delivered clear guidance to employees, ensuring they aligned with customer-focused business goals.
- Built business plans, market research, finance, legal, IT infrastructure, property acquisition to optimize operations and scalability
- Identified target markets and implemented data-driven marketing strategies, increasing new customers by 70%

COURSE AND PERSONAL PROJECTS

Foodie Project, Independent Group Initiative

Ongoing

- Led a team of 3: Designed Full stack MERN app for food reviews using Yelp large scale datasets and Gen AI QA interactive Chatbot
- Agentic AI Agent Development: enable multi tool queries, user email response, managing persistent memory and Mogodb history
- Optimized RAG pipeline with Pinecone, Langchain, and Llama3 to deliver accurate info retrieval with 92% increase in response time
- Deployed LLM and embeddings models on Cloudflare, hosted frontend on Amplify and backend with Lambda, ecr, ecs, fargate, alb
- Dockerized the entire application, packing frontend, backend, and Gen AI models for streamlined deployment and scalability

Multi-Domain Online Marketplace, Enterprise Software Platform, SJSU

Feb 2024 – May 2024

- Led a team of three on multi domain online marketplace. Coordinate tasks and drive project to completion.
- Developed a multi-domain web platform integrating react, mongodb, php, apache http and mysql server, and deployed on AWS EC2

Hackathon for market Research and Food Security, Business Intelligence, SJSU

Apr 2024 – Apr 2024

- Rapidly developed a Gen AI chatbot using RAG, langchain, T5 and chromadb to extract and analyze business insights
- Presented data driven solutions, including interactive visualizations using Plotly and Python to illustrate key market trends

Movie Theater Club Application, Software Systems Engineering, SJSU

Oct 2023 - Dec 2023

- Led a 3 persons team as Scrum Master, managing sprints with Jira and managing version control with GitHub
- Led in system design, created UML diagrams, MongoDB schema, and wireframes and prototype in Figma
- Built backend APIs for CRUD operations, built frontend: navigation, auth, booking, and geolocation. Deployed on AWS EC2

University database management system, Advance DBMS, CSUS

Aug 2020 - Dec 2020

- Designed a database management system for a university including schema design, automated mass data insertion, and added functionality for creating, updating, deleting, dropping, altering, asserting, and view with SQL.

AWARDS AND HONORS

- 1st Place - Inaugural WWCS Intern PRFAQ contest on "Most likely to become an Amazon feature", AWS, 2022
- Dean's Honor Roll: From Spring 2020 to Fall 2023 at The College of Engineering and Comp-Sci, CSUS