Jack Kenney

Software Engineer

Computer scientist excited about designing, developing, testing, and documenting software for the maintainer. History of working in collaborative, agile teams on complex systems.

(508) 971-8461
jack@kenney.dev
linkedin.com/in/jackkenney
github.com/jackkenney

EDUCATION

University of Massachusetts Amherst, College of Information and Computer Sciences

M.S. Computer Science, Bay State Fellow, GPA 4.0 *09/2020 – 05/2022*
B.S. Computer Science, Commonwealth Honors College, GPA 3.904 *09/2015 – 05/2019*

EXPERIENCE

KDL, CICS, UMass Amherst — ***Graduate Research Assistant*** *01/2021 – 06/2022*
Created software package for nonparametric causal effect estimation using Gaussian processes and Markov chain Monte-Carlo approximate Bayesian inference. Researched metrics for robustness of reinforcement learning agents under intervention. Performed causal analysis of vehicle driver behavior during severe weather events.

MathWorks, Natick, MA — ***Engineer*** *09/2019 – 08/2020*
Designed and developed a scalable cloud microservice in Golang for a load-balanced queue service that enabled customer success on the platform. Highlights include concurrent programming, containerized workflows, design reviews, debugging, and unit testing.

UMass Amherst, Amherst, MA — ***Mobile App Developer*** *01/2019 – 09/2019*
Created an accessible cross-platform React Native mobile application to guide people around campuses using crowd-sourced navigation event data and ArcGIS maps provided by university facilities. Team was awarded $10,000+ at the HackUMass-V hackathon.

Optum, Boston, MA — ***Software Engineering Intern*** *06/2017 – 08/2017*
Designed and implemented a document repository with ElasticSearch, Node, and Bootstrap.

iMedia Solutions, Dartmouth, MA — ***Full-Stack Development Intern*** *09/2014 – 05/2015*
Built web applications in Node.js with socket interactions and MySQL data backends.

PROJECTS

GPSLC.jl, a Julia Causal Inference Package — *Julia* *github.com/KDL-UMass/GPSLC.jl*
Designed and implemented a Julia software package for evaluating causal treatment effect estimates using Gaussian processes with structured latent confounders. Features continuous integration, 100% code coverage, unit tests, and Bayesian inference tests.

Bolete Filter Mobile App — *React Native, TypeScript* *github.com/BoleteFilter*
Developed a cross-platform mobile app with React Native for the Western Pennsylvania Mushroom Club's *Bolete Filter* website, a popular mycology resource. Brought to market on the Apple App Store and the Google Play Store with Google Admob advertising.

SKILLS

Business Agile Methods, Collaboration, Communication, Technical Writing
Programming Python, Golang, C++, TypeScript/JavaScript, Julia, SQL, Git, Linux
Theory Data Structures, Algorithms, Multivariate Calculus, Linear Algebra, Statistics