# Vincent W. Freeh, PhD

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I am seeking a role that combines my ability to explain complex, technical topics, both orally and in writing, with my proven skills to create and develop intricate systems. I have demonstrated success in listening to clients and understanding technical issues, in order to design a creative, effective solution to specific problems.

# EXPERIENCE

#### Freeh Enterprise, LLC, freehenterprise.com

Holly Springs, North Carolina — 2016-present

Consulting services offered to clients. Services include designing, building, and supporting custom websites; developing machine learning models; overseeing projects; and more.

- Designed, implemented, and hosted an athlete management application for high-performance, olympic athletes.
- Created a machine-learning model to predict respiratory maladies, such as RSV, from audio samples.
- Created a risk-management application for farmers in cooperation with an agriculture econ professor at NCSU.
- Created, deployed, and currently manage a website that indexes and processes all SEC filings daily. It presents
  novel views of the data. It correlates and cross references entities. It provides analysis--including custom,
  client-requested analytics using machine learning.

## Head of Integrations & DSR, RelyanceAI, Inc

Holly Springs, North Carolina — 2021-2023

Managed a 10-person team that developed and maintained more than 200 integrations with SaaS products as well as the Data Subject Requests (DSR) module. Worked closely with the Customer Success team to understand our customers needs and to prioritize the development of integrations.

- Developed a novel integration framework using NLP (natural language processing) that scans free-text fields for private information, increasing the scope and value of our integrations.
- Created a process to develop partnerships with third-party vendors in order to obtain access to proprietary APIs that regularly closed 15-20 new partnerships per quarter.
- Developed an elaborate DSR module and created a test/simulation environment. The module is a significant upsell for the sales team.
- Established an onboarding plan for the DSR module with the Customer Success team.

#### **Computer Science Professor**

Department of Computer Science, North Carolina State University 2003-2021 Department of Computer Science and Engineering, University of Notre Dame 1996-2003

My research was system-oriented and empirical. It embraced new technologies and was guided by industry needs. Consequently, I enjoyed industrial support and collaborations for most of my academic career. My core areas are distributed systems, storage systems, and operating systems that leverage state-of-the-art technologies. My principal duties were teaching, researching, and mentoring. I conducted research in cloud computing, big-data, distributed systems, file and storage systems, power/energy management, security, and high-performance computing. My latest research focused on data-intensive computing systems, machine-learning, NLP, and Amazon Web Services.

- Taught 50+ courses (15 unique) to more than 2000 students.
- Awarded more than 2 dozen grants totaling approximately \$10M.
- Published 60+ peer-reviewed papers.
- Directed 18 MS and PhD theses.
- Editor, committee member, or reviewer for more than 50 journals or technical conferences.
- Faculty mentor for Linux Users Groups for 20 years.

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#### **Highlights**

- Established joint research program with strength coaches to monitor and analyze real-time physiological data.
- Developed Enterprise Storage Systems course with assistance of local storage vendors EMC, NetApp, and IBM.
- Developed Data-Intensive Computing course in collaboration with big-data company LexisNexis Risk Solutions.
- Significant industry support (IBM, NetApp, LexisNexis Risk Solutions, Amazon Web Services).
- Spent a sabbatical year at NetApp conducting performance analysis of storage systems.

## VP of Engineering (co-founder), Data Decision Models

Raleigh, North Carolina - 2013-2016

Our company marketed a big-data product for lead development that reads hundreds of thousands of web pages extracting *signals of opportunity* using natural language processing specifically developed for each client's data-mining needs.

- Architected big-data infrastructure in Amazon Web Services.
- Designed, supervised, and built both frontend (website) and backend (analytics).
- Company liaison to our clients for product development, implementation, training, and improvement.
- Supervised 5 developers and engineers.

## President (co-founder), GridIronMine.com

Holly Springs, North Carolina — 2007-2009

Created a football analytics website supporting our *victory forecast* analysis—which given any game situation returns the probability of victory at that point. Wrote articles for *Patriots Football Weekly*.

- Built the website in Amazon Web Services.
- Co-created victory forecast model using logistic regression and state machine modeling.
- Built home for the holidays analytical tool that estimates probability of making the playoffs.

## US Army, 23d Engineer Battalion, 3d Armored Division, Hanau, Germany

Served as platoon leader, company executive officer, and assistant battalion operations officer. Promoted to the rank of Captain. Graduated from Airborne School and Ranger School.

# **EDUCATION**

PhD Computer Science (minor in Mathematics) University of Arizona. Dissertation: Software Support for Distributed and Parallel Computing Minor in Mathematics

- MS Computer Science, University of Arizona, Tucson, Arizona.
- BS Engineer Mathematics, University of Arizona, Tucson, Arizona.

# SKILLS

- Excellent written and oral communication skills. Highly accomplished public speaker.
- Long history of managing in diverse environments: soldiers, software engineers, students, and contractors.
- Extensive record of collaboration with colleagues in academia and industry.
- 30+ years of experience as a software developer and innovator.
- Fluent in python, C/C++, SQL, pandas, scipy, jupyter.
- Expert in PostgresSQL, Django, Mongo, AWS, GCP.
- Extensive experience in AI/ML, NLP, LLM, classification, TensorFlow, Hadoop
- Prolific in JIRA, git, github, docker, gitlab, Unix, iOS, Android