Rishi Keshav Pradeep

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Education

- **University of Maryland, College Park** 08/2021 - 05/2025
  Bachelor of Science - Computer Science + Mathematics *GPA: 3.975/4.0*
  - **FIRE Research Fellow:** Capital One Machine Learning Group
  - **Fellow at StartupShell**
  - **Dean's List:** All Semesters
  - **Presidential Scholarship Recipient**

  Courses: *Intro to Compilers, Advanced Data Structures, Algorithms, Intro to Computer Systems, Intro to Data Science*

Experience

- **ZipRecruiter** Santa Monica, California
  Software Engineer Intern *Starting May 2023*
- **Capital One** College Park, Maryland
  Software Engineer Intern - NLP Services *Jan 2023 - Present*
  - Developed a news recommender system with multi-head self-attention based on Microsoft's NRMS.
  - Created Word2Vec embeddings to represent vocabulary from millions of relevant articles.
  - Engineered Named Entity Recognition feature and performed model hyperparameter tuning.
- **University of Maryland, College Park** College Park, Maryland
  Teaching Assistant - Intro to Computer Systems *Aug - Dec 2022*
  - Taught introductory systems concepts such as C, pointers, dynamic memory, IPC, Assembly.
  - Engaged directly with students by hosting recitation sessions and leading office hours for 800+ students.
  - Provided feedback for students through grading coding projects, quizzes, and exams.
- **Curie AI** Santa Clara, California
  Software Engineer Intern - Backend Engineering *Jun - Aug 2022*
  - Implemented backend microservices for integrating Electronic Health Record systems with Curie services.
  - Delivered data transformer and wrapper APIs, enabling seamless retrieval of patient records across Curie services.
  - Dockerized microservices and deployed with AWS Elastic Kubernetes Service.
- **Chaos Genius (YC '20)** Remote
  Software Engineer Intern - ML Algorithm Development *Jun - Aug 2021*
  - Contributed to algorithms for Root Cause Analysis and Anomaly Detection for time series data.
  - Engineered a KPI validation feature, and developed an anomaly severity scoring algorithm.
  - Authored a blog post, "A Brief History of Anomaly Detection".

Projects

- **Brisbane: DirectoryGPT - (LLMs, NLP, Word Vectorization, Question & Answer System, Prompt Engineering)**
  - In a 36hr hackathon, we built A QA system that creates a vectorized knowledge base of local files for GPT-3.5.
  - Answers questions on any data format seamlessly. Crafts fluent responses, citing exact sources and page numbers.
  - Understands code repositories, large PDFs about research, financial data, housing data, etc.
  - Source Code / Demo.
- **YouTube Mentions - (Fullstack Dev, Python, Svelte, NLP, Named Entity Recognition, Web Scraping)**
  - 2nd Place Media Track @ PickHacks 2021 (Missouri University of Science and Technology).
  - Uses Named Entity Recognition to live annotate YouTube videos with relevant context cards.
  - Source Code / Demo.
- **best-comeback - (Python, Facial detection, Facial landmarks, Image Manipulation)**
  - Uses facial landmarks to automatically generate a "Deal With It" gif from an input image.
  - Source Code / Examples
- **Racket Compiler - (Racket, x86, C, Compilers, Programming Languages)**
  - Built a Racket compiler with subset of features to target x86 on 64-bit architecture.
  - Parser, Interpreter, Compiler built with Racket. Executes with a C runtime.
  - Notable features include lambda (anonymous) functions, proper tail calls.

Skills

Languages	Python, C, x86, Java, TypeScript, JavaScript, HTML, CSS, Ruby, OCaml, Rust, SQL, R
Frameworks	Express.js, React.js, Vue.js, Node.js, Flask, Svelte
Tools	Kubernetes, Docker, GIT, Pandas, NoSQL, PostgreSQL, MySQL, SQLite, MongoDB
Platforms	Linux, Web, Firebase, AWS
Soft Skills	Problem Solving, Teaching, Writing, Leadership

Awards, Certifications

- Akuna Capital Options 101 Course
- Akuna Capital Options 201 Course
- 2nd Place Media Track @ PickHacks 2021