Hans B. DeJong

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Summary

I completed my PhD at Stanford in Oceanography where I developed the ability to learn quickly and function independently in a variety of environments. I persevered through challenges, handled ambiguity, collaborated across institutions, and designed and implemented complex projects to completion. I am currently a Computer Science Master's student at UPenn where I am improving my technical skills and am seeking an internship in software engineering.

Education

University of Pennsylvania, Masters in Computer Science (MCIT), GPA: 4.0 expected 2023

Stanford University, PhD Earth System Science, GPA: 4.05

Brown University, B.A. Geology-Biology**,** GPA: 3.9

Courses and Skills

Graduate Level Courses: Discrete Math, Computer Architecture, Computer Systems Programming, Data Structures and Software Design, Advanced Statistical Methods, Vector Calculus
Programming Languages: Java, Python, C/C++, MATLAB, R, Arduino, SQL, HTML, CSS, JavaScript, Git, Docker
Data Science: Data wrangling, data visualization, model selection, uncertainty analysis

Professional Experience

American International School Chennai, Chennai, India 2018-2020
High School Computer Science and Science Teacher

- Collaborated with Stanford professor to teach Computer Science course based on CS 106A, taken by over 1000 students at Stanford each year.

Stanford University, Stanford, CA 2012-2018
Doctoral Candidate and Postdoctoral Research Scientist

- Build computer models, collected and analyzed field data, and processed satellite data to study the impacts of climate change on the Southern Ocean.
- Resulted in 7 peer-reviewed publications in top journals.
- Presented findings at major conferences; expert reviewer for *Nature Geosciences* and *Geophysical Research Letters*.

Projects

Automatic Sampler and Pump: Designed, built, and programmed autonomous submersible multiport water sampler and autonomous underwater pumping system that we deployed on coral reefs.

Our Breathing Planet: Built interactive data visualizations using HTML, CSS, and JavaScript for students to deepen their understanding of the carbon cycle by exploring expert-curated datasets.

Primate Evolution Explorer (in progress): Building a webtool using React where students can quickly find formatted gene sequences for primate species and genes of their choice (58 genes, 168 primate species).

Coursework Projects: Implemented classic algorithms such as Merge Sort and Huffman coding, solved Boggle using recursive backtracking, designed multi-tier Java applications, built a reverse assembler, and programmed a shell in C.

Other

Interests: Soccer, backpacking, travel, juggling, magic tricks
Languages: French, Spanish, Tamil
Background: Born in the US and grew up in India and Madagascar; I have also lived in Mali and South Korea
Field Experience: 168 days at sea on research cruises in the Indian and Southern Oceans; scientific scuba diver (>400 dives)