James R. Hennessy

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SOFTWARE ENGINEER

Skills

- Machine Learning,Bioinformatics
- Jenkins ,CI/CD
- R Shiny, C, Julia
- MySQL, SQLite, MongoDB
- ROS,Operating systems/networking
- Python ,C++,Java
- UNIX,Linux,cMake
- AWS,Image Processing,Clojure
- CHIP/RNA -SEQ,BLAST

Software Engineering Experience

Johnson and Johnson Digital Surgery(Verb/Auris Health) , Software Engineer for Software Productivity and Data Engineering Mountain View CA, Aug 2018- Current

Programmed testing infrastructure for state machine, system image creation, and automation of robot state testing in Python and c++. Used Numpy/Scipy/Pandas. Focused on system software and hardware integration. Worked with Rust on embedded engineering. Worked with updating Jenkins and other CI/CD pipelines.Worked with actuator and embedded system architectures, and QNX/RTOS operating systems. Made Django/Flask apps as GUI's for systems connected to AWS. Worked on products with the Robotics Control group.

MachineVantage, **Software /Data Engineer**, Berkeley, CA Oct 2017 – Aug 2018

Used Healthcare data to build ML models to predict second heart attack recurrence rates based on hospital stays and smoking habits.Built APIS for Natural Language Processing on advertising and marketing campaigns, along with building ML models . Created NLP algorithms and built large web scrappers. Built with Mongodb ,Python, and Javascript. Did data mining techniques for songs and movies. Went to at Zensar Technologies from June-Aug as Consultant .

Stanford Genome Technology Center, Data Analyst/Software Engineer, Palo Alto, CA Jan 2017 – July2017

Built a MySQL database for the Genome Natural Products Group hold tests and results, and scripted Python and PHP web applications to view and update the database. Developed web applications for large genomic data transformation and presentation. Worked in AWS. Did analysis in R and Python. Acted as the lab software engineer. Coauthor on published paper in high impact journal.

Miller School of Medicine Research Programmer, Coral Gables, FL Sept 2015 - Dec 2016

Engineered a bioinformatics tool in R Shiny/Python called "Microscope" to help analyze and visualize large amounts genetic and sequencing data for heat maps. Published by "BMC Bioinformatics", acted as second author and three citations. Second paper also in R Shiny "ShinyHeatmap" released this Spring in PLOS ONE. Used Rust for sideproject simulation.

https://bmcbioinformatics.biomedcentral.com/articles/10.1186/s12859-016-1260-x

http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0176334

Education & Honors

University of Miami, Coral Gables,May 2016

Bachelor of Science in Mathematics/Statistics/CS; Minor in Finance, and Political Science

Alpha Lambda Delta Honor Society ■ *National Society of Collegiate Scholars* ■ *Coral Gables Scholarship*

Edx, 2019-2020

Solar Energy Panels, Electric Vehicles :Technology , Robotics, see Linkedin for more details

Industry Event Participation

15 Hackathons, 2 time winner, 2 time runner-up. See github and devposts for more details

See code sample at https://github.com/jamesthesnake