Veena Krish

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PhD Student in Computer Science, Stony Brook University — Aug 2019 – present
First year PhD Student, interested in the security of emerging medical technologies — Stony Brook, NY
Graduate Coursework: Network Security, Machine Learning, Computer Vision

MSE and BSE in Bioengineering, University of Pennsylvania's School of Engineering and Applied Science — May 2016
BSE GPA: 3.48/4.00 (Cum Laude) MSE GPA: 3.33/4.00 — Philadelphia, PA
Senior design project/Master's focus: EasySVR, a noninvasive medical device that measures systemic vascular resistance, a cardiovascular parameter used to monitor severe heart failure (shockanalyticsllc.com)
TA experience**:** TA for ENGR 105: Scientific Computing (MATLAB) for freshmen and sophomore bioengineers
Extracurricular Interests**:** VP of Penn Preceptorials (organized short courses for students), Philosophy Club (volunteer teacher for after-school philosophy classes for Philadelphia high-schoolers), PennApps (regular participant in student-run hackathon)

High School Diploma, Hopkins School — June 2011
Extracurricular Interests: Varsity fencing, Model United Nations — New Haven, CT

Analyst Programmer, Tessella Inc — 2016 - 2019
• Selected project history from 2 years as a data scientist for analytics consulting services company: — Needham, MA
  • Designed and implemented bayesian statistical models for a large pharmaceutical company to quantify the "Go/No-Go" decision used to continue or terminate a clinical trial. I developed the models under oversight of one senior statistician and added them to an existing C#/WPF application for use by the clinical operations team.
  • Developed and supported a LIMS application to track biomarkers for a small biotech company. I was the junior developer for over a year in a team of 3, where I was involved in the full stack (Postgres DB, Java service/API, Aurelia JS front end, AWS).
  • Primary data scientist on an exploratory project looking at poultry gut microbial data and nutrition. Developed machine learning models to understand relationships among measures of gut health.
  • Regular contributor to bi-weekly AI journal club

Co-founder, Shock Analytics LLC — 2015 - 2019
• Senior design project and Master's focus, launched from the University of Pennsylvania — Philadelphia, PA
• Built the initial prototype (MATLAB and C/Arduino) and developed software for data collection and modeling (Arduino, C#, R Shiny).
• Accepted into the DevelUPmed startup accelerator, which provided valuable mentorship in defining business goals, attracting investors, and building rapid prototypes.
• Patent (pending): Methods, Systems, and Computer Readable Media for Measuring Systemic Vascular Resistance

Developer, Art & Alchemy (www.artandalchemy.io) — 2015 - 2016
• Part-time developer for a startup invested in immersive experiences for art, gaming, and social impact. — Philadelphia, PA
• Helped develop a system in MATLAB and C++ to analyze breathing from the Sony Morpheus microphone for VR gameplay.

Technology Fellow, Coalition for Queens (www.c4q.com) — Summer 2015
• Assisted curriculum development and classroom operations a nonprofit (rebranded as Pursuit) that offers software development training programs as a means of economic mobility. — Queens NY

Research Assistant, Littlejohn Fellow, Litt Translational Neuroengineering Lab, University of Pennsylvania — 2013 - 2014
• Implemented a 3D image coregistration algorithm in a Mac OS application (Objective C, Bash) from a large Research collaboration under Dr Brian Litt — Philadelphia, PA
  • Azarion AA, Wu J, Davis KA, Pearce A, Krish VT, Wagenaar J, Chen W, Zheng Y, Wang H, Lucas TH, Litt B, Gee JC. An open-source automated platform for three-dimensional visualization of subdural electrodes using CT-MRI coregistration. Epilepsia. Dec 2014. doi: 10.1111/epi.12827
• Developed Java command-line tools for the International Epilepsy Electrophysiology Portal