Samir Ghosh

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lab management, software engineering, computational linguistics, creative code, lowercase words

Education

B.S. Computational Linguistics USC '18
Deep learning for syntax models, Forensic linguistics

B.A. Cognitive Science USC '19

Experience

Assistant Director, USC Harman Academy for Polymathic Study   Jan 2019 - Present
The Ahmanson Lab at the Harman Academy provides a makerspace facility, produces projects, and holds workshops

- Project manages and contributes to over 12 VR, mobile app, microcontroller, and humanities research projects with about 50 students and professors every academic year
- Acquires funding, speaking engagements, and resources for professors in disparate disciplines by helping secure grants, holding highly attended panels, and training technically skilled students
- Teaches a hands-on workshop series spanning deep learning, VR and AR development, computer graphics, robotics, 3D printing, and issues in privacy rights and AI
- Maintains makerspace resources for students and professors (weekly usage 100 to 250 people)
- Produced various VR experiences including collaborating with the California Science Center to design a moon colonization exhibit, and working with The Vatican and art historians to exhibit the Stanza della Segnatura

DevOps Engineering Intern, Intel Corporation   Summer '16, Summer '18
My division managed and used massive server farms and supercomputers for in-house computing

- Implemented a scalable, real-time cybersecurity threat responder and visualization system using OSSEC, Wazuh and Elasticsearch (200k+ machines monitored per instance)
- Extended a hardware agnostic firmware service tool from CLI to a web interface using Node.js and various front-end frameworks
- Created real-time visualizations of server availability and update status during scheduled server farm downtime using Kibana and Python scripting

Software Assistant for Behnaz Farahi   Aug 2016 - Dec 2017
Behnaz Farahi produces internationally acclaimed fashion pieces, integrating cutting edge wearable technology

- Designed computationally efficient microcontroller software to integrate various sensor data with lights, pneumatics, and motor driven systems concealed in 3D-printed dresses
- Repaired electronics and modified code under time pressure at exhibitions, runway shows, and film shoots
- Communicated technical information to electrical and mechanical engineers, models, and production crews

Co-founder, clevergrads.com   Dec 2016 - July 2017
This profitable student-run business sold affordable gowns and sashes and undercut USC

- Researched, analyzed, and exploited competitors' supply chain and marketing strategies
- Conducted and rapidly iterated on multi-language print and social media marketing campaigns (5k reach)
- Designed and worked in order packaging, delivery, sales and inventory management

*also ask me about consulting experience in forensic linguistics, voice synthesis, and neuroscience research

Technical Skills

Software	Hardware
Languages: Javascript, C++, Python	Microcontrollers: Raspberry PI, Arduino
Server-side: Node.js, Elasticsearch stack, API Testing	CAD/3D Modeling: Blender, Autodesk Inventor
Front-end: HTML/CSS/JS, WebGL	Plastic Manufacturing: 3D Printing, Molds, Fasteners
Operating Systems: Ubuntu, CentOS	Metal Manufacturing: Mill, Lathe (aluminum and steel)