XINRAN LI

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OBJECTIVE: To obtain a full-time position in software engineering or web development

EDUCATION

Carnegie Mellon University (CMU) *Pittsburgh, PA*
M.S. in Computational Biology *Aug 2014 – Dec 2015(expected)*
Honor: Merit Fellowship (Tuition Scholarship) from Department of Biological Sciences
Selected Courses: *Machine Learning, Bioimage Informatics, Programming for Scientists, Network Science*

Sun Yat-sen University (SYSU) *Guangzhou, China*
B.S. in Biological Science *Sep 2010 – June 2014, China*
Honor: Best software tool project and gold award in 2013 iGEM (International Genetic Engineering Machine) world competition held in MIT, Boston (SYSU-Software team member) *Nov, 2013, MIT*

TECHNICAL SKILLS

Languages	Python, Java, Go, Perl, R, HTML, CSS, JavaScript
Operating Systems	MacOX, Windows, Linux/Unix
Other Specialities	Adobe Photoshop, Bootstrap, MySQL, Vim, Git, bash, jQuery, Django, AJAX

WORK EXPERIENCE

Philips Research *May 2015 – Aug 2015*
Research Intern of Clinical Informatics Solutions and Services(CISS) *Briarcliff Manor, NY*

· Developed a program in Python to predict antibiotic resistant genes by mapping SNPs to corresponding genes in *Enterococcus faecalis* chromosome and classify potential mutations into synonymous and non-synonymous.

· Employed statistical method to estimate correlation between putative antibiotic resistant genes to clinical profiles based on Chi-Square test using R.

SELECTED PROJECTS

Social Network (Deployed on AWS EC2) *Jan 2015 - Mar 2015, CMU*

· Developed an dynamic website that supports registration, authentication, email verification, photo upload, and quasi-real-time updates using JavaScript and AJAX based on Django Framework and SQLite.

· Design front-end visualization and user interface using Photoshop, HTML and CSS.

Biological Data Mining and Bioimage Processing *Oct, 2014 - May 2015, CMU*

· Applied R to visualize small-noncoding RNA and RNA-Binding proteins interactions network.

· Used Matlab to perform noise filtering, feature detection, image segmentation and simulation of microphotographs.

Analysis of CRISPR/Cas9-induced DNA Sequences Differences *Mar, 2014 - Jun, 2014, SYSU*

· Developed a program in Perl to analyze CRISPR/Cas9 edited DNA sequence of *CD274* gene and *B2M* gene in two different human cell lines and estimated CRISPR/Cas9 gene-editing efficiency.

Computer Aided Synbio Tool for Synthetic Biology (Team project) *Mar, 2013 - Nov 2013, SYSU*

· Developed a software which enables regulatory networks simulation, gene circuits design, modeling, vector design to address specific technical challenges in synthetic biology by mathematical modeling.

· Designed icons, software UI, website graphic interfaces and illustrative postboard.