Ed Chalstrey

edwardchalstrey@gmail.com
edchalstrey.com | uk.linkedin.com/in/edchalstrey
DOB: 23/08/1992

Profile

Currently employed as a PHP coder at a FinTech company and completing an MSc in Bioinformatics with Systems Biology. Background in academic research, including a year of computational biology research at a world-leading plant-disease research institute.

Science/Tech Skills and Experience

- PHP/Ruby/Python - experience working in these languages
- Creation of Ruby Gems (packages) with over 20K downloads
- Pair programming and code review with colleagues
- Test driven development experience, bug fixing and regression testing
- Project management and software versioning with Git/GitHub
- Integration of new functionality into existing software
- Web technology skills: HTML/CSS/JavaScript/JSON/XML
- Database creation and manipulation with SQL
- Analysis of research output data and statistics in R
- Data Science - Organisation of accessible and reproducible research data with GitHub/Jupyter
- Design and production of a scientific software including a genetic algorithm
- Experience working with large online databases via API in a research context
- Presentation of original research at conferences/seminars
- Comfortable learning new concepts in statistics, computing and science generally
- Experience working as part of a research group and coordination of group projects
- Experience training junior colleagues
- Experience dealing with high volume of client emails/demands and conflicting deadlines

Employment

Dates	Company		Job title/info
05/17 - Present	UCB		*Project student* – MSc Research project
10/16 - Present	Citi		*Consultant from WallStreetDocs*
09/15 - Present	WallStreetDocs		*PHP Document Template Engineer* - Document automation platform with investment bank clients.
05/15 - 08/15	University College London (UCL)		*Research Intern* - 3 month computational biology internship. Research info below.
08/13 - 07/14	The Sainsbury Laboratory (TSL)		*Research Intern* - 12-month graduate internship in computational biology. Research info below.

Education

Dates	School	Course	Grade
10/16 - Date	Birkbeck, University of London	*MSc Bioinformatics with Systems Biology*	*Ongoing*
10/10 - 06/13	University	*BSc Biological Sciences*	*2.1*

	of Essex		
09/03 - 06/10	Chipping Norton School	*A Levels* Biology, Chemistry and Physics *GCSE's including:* Maths, Additional Science, English	B, B, C A, A*, B

Referees

References available on request.

Research

Birkbeck, UoL MSc project with pharmaceutical company: UCB
Ongoing project that involves the development of software to find applications for new drug compounds, based on the diseases known to be associated with targets of the drugs. To this end, I utilize the free online software "Open Targets Platform" which compiles/validates evidence for drug-target interactions and target-disease associations from multiple data sources and evidence types.

UCL Summer Internship Project:
Computational biology project that involved extension of the django-based python code for the OMA orthology browser, to include domain architecture images for the protein sequences.

TSL 12-month Internship Project:
Bioinformatics algorithm development project, with an aim to locate phenotype-causing SNPs in backcrossed mutagenized plant genomes. A genetic algorithm approach was used to find the correct permutation of unordered sequence contigs, based on the expectation of a peak in the ratio of homozygous to heterozygous SNP density, around the location of the causative SNP. Full documentation and source code for the project can be found at:
edwardchalstrey1.github.io/fragmented_genome_with_snps

University of Essex Dissertation Project in Molecular Science:
Bioinformatics research project involving the differential profiling of transcriptomes from stage 1a lung adenocarcinoma tissue and adjacent healthy lung cells. Gene Ontology annotation and enrichment analysis were used to identify potential targets for interfering drug therapy.

Other Interests

- Learning about how new tech/science is changing the world via podcasts, books, online videos
- Recording and producing music, playing guitar
- Squash, skiing, scuba diving, running, gym