Christopher Oldham

Education

2015–2019 **B.S.E. in Computer Science and Engineering (Honors)**, *Magna cum laude*, University of Connecticut, Concentration in Bioinformatics. GPA: 3.86/4.00.
Honors Scholar; Sophomore Honors Award; Certificate of Outstanding Achievement; Engineering Dean's List; Upsilon Pi Epsilon Computing Honor Society; Tau Beta Pi Engineering Honor Society

2014–2018 **Bachelor of Science in Physics**, *Magna cum laude*, University of Connecticut,
Minor in Mathematics, GPA: 3.86/4.00.
Research in experimental nuclear physics under Andrew Puckett; Phi Beta Kappa and Sigma Pi Sigma Honor Societies; Academic Excellence Scholarship; Dean's List

Projects

2018–2019 **SCarborSNV Algorithm and Tool**, Honors Thesis in Bioinformatics.
Efficient phylogeny-aware single nucleotide variant detection for single cell DNA sequence data.
- Novel algorithm with asymptotic speedup over the state-of-the-art;
- Detailed mathematical description, written paper and full C implementation for CLI tool;
- Robust, efficient and can be used in research/medical sequence analysis pipelines.

2020–2021 **Continuum Android App**, A Daily Habit Tracking App that Works.
React Native + Redux app currently in the Android Play Store
- Stable, attractive, intuitive app with unique notion of habit "momentum";
- Local notification and Play Store billing integrations;

2020–2020 **CVInglés website**, Profesional CV services for Latin Americans looking for .
A semi-automated CV translation, editing and typesetting website
- User JSON form data in either English or Spanish converted to a compilable LaTeX document;
- Front end: React, Stripe, HTML, CSS, Javascript;
- Back end: AWS API Gateway, Lambda (Python), DynamoDB, SQS, SES, CloudFront, Route53.

Experience

2018–2019 **Research Assistant**, *University of Connecticut*, USA.
Individual and collaborative research into novel bioinformatics algorithms under Yufeng Wu and experimental nuclear physics under Andrew Puckett.
- Algorithm design and benchmarking, writing custom tools in C and Python. Some of this research culminated in my undergraduate thesis;
- Testing and calibration of precision particle detector components, including ultra high speed data capture and some automation using LabVIEW.

Jun–Aug 2017 **Digital Technology Leadership Program Intern**, *United Technologies*, USA.
At Pratt & Whitney, I led a cross-functional team to plan, prepare and execute testing for a large, business-wide software project. I worked closely with supply chain and logistics experts, software developers, aerospace engineers, multiple IT teams and management to develop and execute a test strategy that covered integration testing and user acceptance testing.
- Worked with the business to define over 250 use-case scenarios for the new software, and coordinated multiple business and IT teams to develop and execute test scripts. This included planning and running frequent meetings, some with 30+ attendants;

Dec 2015–Mar 2016 **Systems Integration Engineer**, *NXEGEN, LLC*, USA.
Assisted with back end maintenance and development using Visual Studio, C#, MS SQL; Assembled and compiled efficiency reports from test data, turning SQL commands into actionable information.

Skills

Languages English, Spanish, Python, JavaScript, C, Java, LaTeX

Tools Git, Linux, VIM, LabView, TensorFlow, Office Suite, GIMP

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