

Kevin N. Heath

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CONTACT INFORMATION	1606 W. Thunderhill Dr. Phoenix, AZ 85045	(480) 577-9529 kevin.n.heath@gmail.com
RESEARCH INTERESTS	Behavioral modeling, Individual-based modeling, algorithm development, bumblebees, machine learning	
EDUCATION	Worcester Polytechnic Institute , Worcester, MA Ph.D., Bioinformatics & Computational Biology, <i>Expected:</i> Spring 2021	
	Harvey Mudd College , Claremont, CA B.S., Mathematical & Computational Biology (Joint Major), May 2016	
RESEARCH EXPERIENCE	Research Assistant , BCB Program, WPI August 2016 to present <ul style="list-style-type: none">> Individual-based modeling in NetLogo.> Modeling the impact of pesticides on bumblebee population dynamics. Research Intern , Department of Biology, HMC 2015-2016 <ul style="list-style-type: none">> Developed algorithms to identify horizontal gene transfer events in bacterial species and implemented them in Python.> Generated a phylogenetic tree of 98 related bacterial species with RAxML. Research Intern , Department of Biology, HMC 2014-2015 <ul style="list-style-type: none">> Conducted a study of the hybridization of soft corals using NGS (RADseq)> Designed primers to sequence the genomes of two species of coral. Research Intern , Department of Biology, HMC 2014-2015 <ul style="list-style-type: none">> Designed and implemented a general non-linear parameter estimation algorithm for biological models> Programmed in C++, utilized OpenMP and XSEDE Blacklight	
CS PROJECTS	How Much Did it Rain? II - Kaggle Competition Sept. - Dec. 2015 <ul style="list-style-type: none">> Competed in the <i>How Much Did it Rain? II</i> machine learning competition> Experimented with linear and logistic regression to improve on the traditional Marshall-Palmer algorithm Safety Alert Sept. - Dec. 2014 <ul style="list-style-type: none">> Developed a functional Android app to quickly and discreetly alert the user's contacts in the event of trouble> The goal of this app was to promote safety around college campuses in Claremont	
TECHNICAL SKILLS	C++, Python, Java, R, Processing, LabVIEW, MATLAB, Android Studio, Adobe InDesign, L ^A T _E X, Github, HTML5, Lasergene, Geneious, NetLogo	