

Ryan Routsong

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Everett, WA

EDUCATION

- City University of Seattle, Fall 2017-19, Student, MS in Computer Science
- University of Washington, 06/2012-03/2015, B.S. in Biochemistry
- North Seattle Community College, 05/2011-06/2012, A.S.
- University of Arkansas at Little Rock, 05/2006-08/2008, Computer Science Major
- Hope High School High School Diploma, Hope, AR

WORK EXPERIENCE

University of Washington

Department of Civil and Environmental Engineering

Strand Lab: Research Technician II, Lab Manager

12/2014 – Present

- Laboratory management/purchasing/requisitioning, hiring junior staff, project management, autonomous research activities.
- Conducted transformation research on multiple plant species, under DOE and NSF grants.
- Expert familiarity with common biochemical benchtop applications: (q)(RT)PCR, protein assays, conjugation, tissue extractions and cultures, solid phase extraction, transformation.
- Created sequencing and vector creation pipeline using NCBI and python, to evaluate promoter efficiency within a newly transformed plant species.

Freelance application and web service development

Portfolio: <http://ryanroutsong.me>

Github: <https://github.com/rroutsong>

2010-Present

- Work with small business clients developing automation solutions for their small businesses.
- Also provide website support, hosting, development, and design.
- Utilize shell scripting, cron jobs, python/ruby/JavaScript/C++ for applications, and CSS/HTML/JavaScript/PHP/MySQL/NoSQL for web development

Virginia Mason Medical Center

Cardiac Monitor Technician/Health Unit Coordinator

03/2010 – 06/2015

- Monitored, observed, and reported 10-50 patient's cardiac electrophysiology per shift
- Participated in Lean Improvement (Kaizen) events for facilitation of new central cardiac monitoring system
- Assisted with orthopedic research study involving IRB contact, and physician contact
- As health unit coordinator, I facilitated storage and recording of HIPPA regulated medical documentation, minor medical coding, and direct patient and family contact

King County Medical Examiner

Autopsy Technician Intern

01/2012-08/2012

- Assisted with organ extraction via Rokitansky methodology
- Observed, reported, and monitored external and internal autopsy findings
- Cleaned and maintained autopsy stations
- Transcribed medical recordings

Webbeddy.com & Dr PC Fix

Web Developer, Server Administrator

03/2009- 03/2010

- Developed and deployed small business websites
- Utilized PHP, MySQL, python, bash languages for client's webserver and sites.
- Created and manipulated images using Adobe PS
- Assisted with PC repair
- Administrated MySQL databases for 150+ clients, including data migration, manipulation, and optimization

Quicklight Computers

Web Developer, Server Administrator, and Computer repair technician

12/2008-06/2009

- Facilitated repair of client's computers or devices
- Worked contract jobs networking business' clientele office and consumer clientele's homes
- Minor small business web site development

Arkansas Children's Hospital

Patient Care Technician for step down ICU

12/2007-05/2009

More job history available upon request.

PUBLICATIONS

Zhang, L., Routsong, R., Nguyen, Q., Rylott, E. L., Bruce, N. C. and Strand, S. E. (2016),
Expression in grasses of multiple transgenes for degradation of munitions compounds
on live fire training ranges. *Plant Biotechnol J.* doi:10.1111/pbi.12661

Zhang, L., Routsong, R., Strand, S.E. (2017),
Enhanced metabolism of Volatile Organic Compounds (VOCs) in pothos (*Epipremnum
aureum*) by expression mammalian cytochrome P450 *2e1* gene. Department of Civil and
Environmental Engineering, University of Washington. *Environmental Sci. & Tech.*
(review)

VOLUNTEER EXPERIENCE

- Pacific Science Center, Science on Wheels Educational Outreach, 11/2010-1/2012
- Catholic Community Services, Youth Tutor Volunteer, 06/2011-08/2011

UNDERGRADUATE RESEARCH/PROJECTS

- University of Washington, Department of Civil and Environmental Engineering
 - Autumn, Winter, Spring quarter 2013-14
 - Dr. Stuart Strand
 - Transgenic manipulation of the house plant *E. aureum* ('pothos' ivy) to promote indoor air remediation via stromal uptake and enzymatic degradation by the mammalian cytochrome CYP 2E1 targeting volatile organic chemicals.
- University of Washington, Department of Pharmacology
 - Winter, Summer quarter 2013
 - Dr. Richard Gardner
 - Investigation and characterization of nuclear inclusion bodies in the yeast *S. cerevisiae* using immunoblotting.
- University of Washington, Department of Educational Psychology
 - Summer, Autumn, Winter quarter 2012
 - Dr. Nancy Hertzog
 - Qualitative investigation and analysis of factors affecting school-age girls and their interest in STEM fields via Saturday after-school programs hosted by the Nancy Robinson Center for young scholars.