

Erin Dunkley

Software Engineer

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TECHNOLOGIES

Languages | Python, JavaScript (AJAX, JSON), HTML, CSS, SQL

Frameworks & Libraries | Flask, Bootstrap, Jinja, React

Database & Industry Tools | PostgreSQL, Git, GitHub, Command Line

Tools/Software | GMID-X (genotyping software), CODIS (SQL database)

EDUCATION AND TRAINING

Hackbright Academy, San Francisco, CA **March 2023**
Software Engineering Fellowship - Accelerated, 12-week, software engineering program

University of Florida, Gainesville, FL **Aug 2017**
Master of Science, Pharmacy with an emphasis in Forensic DNA & Serology

Grossmont College, San Diego, CA **Dec 2012**
Certificate in Forensic Technology

San Diego State University, San Diego, CA **May 2004**
Bachelor of Science, Biology with an emphasis in Cellular & Molecular Biology

PROJECT

TO-DO: Task Organization for Dwelling Optimization

<https://github.com/edunkpatrick/TO-DO>

A task-tracking Flask app for communicating status of shared tasks within a household. Members of a household can assign themselves or other housemates a task, track completion of tasks, visualize each member's contributions utilizing Chart JS, and send text reminders with Twilio SMS.

CERTIFICATIONS

Lean Six Sigma Green Belt

Quality Assurance Standards and Auditor Training Curriculum for Forensic DNA Testing

PROFESSIONAL EXPERIENCE

Alameda County Sheriff's Office, Oakland, CA

Criminalist III

March 2018-Present

- CODIS Administrator
- Examine evidence for biological material, perform STR DNA typing analysis, report results, and testify to results in court
- Document crime scene and vehicle examinations, collect evidence, and testify to results in court
- Completed validation for 3-person mixture interpretation

- Qualified FBI QAS Auditor and ANAB Technical Assessor ISO 17025:2017

Acting Supervising Criminalist

March 2017-Sept 2017

- Supervised 3 Criminalists in the Forensic Biology Unit
- Managed case assignments and submitted monthly reports to the Laboratory Director
- Completed administrative reviews of case files and reports
- Implemented daily scrum meetings to track progress of casework and validation projects

Criminalist II

Nov 2016 - March 2017, Sept 2017-March 2018

- Examined evidence for biological material, perform STR DNA typing analysis, report results, and testify to results in court
- Documented crime scene and vehicle examinations, collect evidence, and testify to results in court
- Alternate CODIS Administrator

San Francisco Police Department, San Francisco, CA

Criminalist II

Aug 2011 – Oct 2016

- Decreased turnaround time by 62% by implementing Lean Six Sigma methods
- Participated in daily scrum meetings to ensure efficient workflow of casework
- Examine evidence for biological material, perform STR DNA typing analysis, report results, and testify to results in court
- Performed the validation of a silica-based nucleic acid purification method on a robotic extraction platform, a validation of centrifugal concentrators for concentration of nuclear DNA, and a validation utilizing cRNA for improved extraction of low-level samples

San Diego County Sheriff's Department, San Diego, CA

Criminalist I

May 2008 – Aug 2011

- Examined evidence for biological material, perform STR DNA typing analysis, report results, and testify to results in court
- Performed quality control testing of reagents for the Forensic Biology section
- Stayed current with continuing education by attending professional conferences and meetings

Laboratory Assistant

Aug 2005 – May 2008

- Performed quality control of reagents and maintenance of instruments
- Tracked inventory of supplies and kept accurate records of orders placed
- Completed validations for silica-based nucleic acid purification methods using robotic extraction platforms

PRESENTATIONS

Identification of the Oakland warehouse fire victims: CAC Spring seminar, May 2017

Identification of the Oakland warehouse fire victims: Applied Biosystems HID University, January 2017

Poster: Comparison of Three 6-dye STR DNA Typing Kits: ISHI Conference, October 2015

Improving DNA Extraction Efficiency with Robotics: Qiagen Forensic Leadership Summit, June 2015

Evidence Collection: County of San Diego Animal Control Academy, August 2010

Evidence Collection: County of San Diego Animal Control Academy, August 2009

ACTIVITIES/INTERESTS

Creating various containers out of clay on the pottery wheel.