# ALAN J. KARP

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## EMPLOYMENT

### ENGINEERING INTERNSHIP - SAK CONSTRUCTION
BALTIMORE, MARYLAND | 05/10/15- 09/05/15

Assisted in the underground piping renovation across all of Maryland.
Day to today operations included CIPP Lining, CIPP Pressure – Pipe Lining, Large Diameter Tunneling, Spiral Wound PVC (SPR), Shaft Excavation, Shotcreting, and Large Diameter Sliplining.

### WORKSTUDY - CHARM CITY YOGA
BALTIMORE, MARYLAND | 01/2015 - 6/2015

Workstudy at the top ranked yoga studio in Maryland.
Expected to demonstrate respect, reliability and accountability in order to make students feel that each visit was an exceptional experience.

### APPRENTICESHIP - EDDIE'S STONE MASONRY
SPARKS GLENCOE, MARYLAND | 05/2014 - 08/2014

Employed by the founder of Pandora Jewlery on his three year old mansion site.
Learned the valuable trade and discipline of stone masonry through an apprenticeship under senior masons.
Operated heavy machinery, preformed numerous hard labor tasks, and became very familiar with the responsibilities of an everyday construction site.

### INTERNSHIP - GREATER BALTIMORE MEDICAL CENTER E.R.
BALTIMORE, MARYLAND | 06/2012 - 12/2013

Worked as an XRay-Radiology Technology Assistant.
Prepared patients for X-Ray and examination, changed IV's, checked vital signs, recorded vital statistics.

## ENGINEERING

### GROUP MEMBER - CHEMICAL PROCESS SAFETY AND CONTROL
BALTIMORE, MARYLAND | 01/13 - 05/14

Designed and optimized a new form of pain relief drug called Stopitol by optimizing ratio of instant to extended release capsules using information from Research and Development team.
Created and designed safe and efficient processes to meet supply demands set by R&D by implementing HAZOP analysis, inherently safer design, safety in process industries, runaway reactions control, and chemical reactivity hazards.
Wrote bi-weekly progress memos and bi-weekly reports on findings.

### GROUP LEADER - CHEMICAL PROCESS THERMODYNAMICS
BALTIMORE, MARYLAND | 08/13 - 12/13

Applied knowledge of thermodynamics and debugging techniques while computer-modeling a regenerative steam power plant process in the *Aspen* software suite.
Compiled final PowerPoint presentation and presented accumulated knowledge
Demonstrated Technical and organizational skills necessary to ensure the team's performance.

## EDUCATION

### UNIVERSITY OF MARYLAND, BALTIMORE COUNTY

**MAJOR:** CHEMICAL ENGINEERING
**PROGRAM:** SENIOR SCHOLAR
**GRADUATING:** MAY 2016

- Experience with MATLAB, AutoCAD, Process Design & Safety, ASPEN
- Proficient scientific and technical writer
- Confident public speaker

## ACCOMPLISHMENTS

**CONTINUING MEMBER**
AMERICAN INSTITUTE OF CHEMICAL ENGINEERS

**FOUNDING MEMBER**
OF UMBC BIODIESEL CLUB

**REGIONAL & NATIONAL CHAMPION**
BALLROOM DANCE

**VICE PRESIDENT, INSTRUCTOR**
UMBC BALLROOM DANCE CLUB

**CHAPTER CO-CAPTAIN**
MULTIPLE SCLEROSIS BIKE 150 (MILE)