# PATRICK TUTTLE

#### **SKILLS & ABILITIES**

- Directly supervised and maintained records for over 200 complex maintenance evolutions on multi-million dollar equipment.
- Skilled in MATLAB, C++, Maple, MS Office, Aspen Plus, analog and solid-state equipment troubleshooting and maintenance, P&ID generation.

### **EXPERIENCE**

### DOWDUPONT- DOW AGROSCIENCES - MIDLAND, MI

MAY 2017-AUGUST 2017

Production Engineer Intern

- Improved and developed procedures critical to quality assurance of re-work material, resulting in cost savings of \$125,000.
- Performed troubleshooting and calculations of pump performance, reducing pump maintenance costs of \$15,000.
- Lead the 5-year required audit of Loss Prevention Principles.
- Field verified and updated plant Piping & Instrument Diagrams (P&IDs).
- Performed troubleshooting and performance calculations on steam jet ejectors.

## QUEENSBOROUGH COMMUNITY COLLEGE—BAYSIDE, NY

AUGUST 2016-MAY 2017

Research Student

- Performed synthesis and purification of a series of imidazole and carbazole compounds through substitution reactions.
- Studied the effect of carbon chain length on compound conductivity.
- Gained experience in NMR, TLC, organic synthesis, UV-vis, flash chromatography and other purification methods.

## **UNITED STATES NAVY**

DECEMBER 2009-SEPTEMBER 2014

Nuclear Reactor Operator

- Advanced through increasingly responsible positions in nuclear equipment operation, maintenance, and safety. Selected by supervisor out of 25 technicians to handle and lead the most complex maintenance in the reactor plant.
- Performed chemical evaluations on Steam Plant chemical systems.

Equipment Maintenance & Repair

- Experienced in the operation and maintenance of multi-million dollar, microprocessor equipment.
- Performed troubleshooting of electrical and mechanical systems and schematics.
- Researched, procured, & replaced equipment involved in reactor safety & parameter monitoring.

### Nuclear Instructor

- Trained over 600 sailors in the operation, maintenance, theory, & safety of nuclear equipment.
- Mentored 25 sailors about Navy core values & success in the Nuclear Training Pipeline & Fleet.

**Awards:** Navy and Marine Corp Achievement medal, Junior instructor of the quarter, Maintenance Supervisor of the Year.

### **EDUCATION**

## THE CITY COLLEGE OF NEW YORK- NEW YORK, NY

JANUARY 2016-MAY 2019

Bachelor's of Engineering in Chemical Engineering.

## QUEENSBOROUGH COMMUNITY COLLEGE-BAYSIDE. NY

JANUARY 2015-JANUARY 2016

Associates of Science in Engineering Sciences(Chemical Engineering)

GPA: 3.64/4.0

Honors: SCI Scholar, Rose Mancott Memorial Award for excellence in Chemistry, Veteran's Academic Excellence Award, Dean's List (4/4 Semesters)

Membership: ACS, AiCHe, Science Research Alliance

### **COMMUNICATION**

- Researched, wrote, and presented procedures for uncommon and complex maintenance evolutions, such as annual reactor control rod testing, semi-annual steam generator pressure relief valve testing, and reactor compartment inspections.
- Presented research findings and techniques, through poster board and oral presentations, at national and university hosted conventions.
- Negotiated prices and procured equipment which amounted to multi-million dollar savings.

## **LEADERSHIP**

- 2016 ACS Chemistry week volunteer.
- Maintenance supervisor, team leader, and small capital project manager.
- Mentored 25 sailors on stress and time management, naval career development, and naval core values.
- United Way and Habitat for Humanity Volunteer-helped repair and improve homes of flood victims. Repainted schools for underprivileged children.