Disinfecting Robot Design Plan Proposal

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Outline

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- 2 Current Design
- 3 Development Plan
 - CAD Modeling
 - Electrical and Software Design

Introduction



Figure: UVD Robot, source: http://www.uvd-robots.com/

BRADLEY University

Introduction



Figure: Xenex LightStrike Germ-Zapping Robot, source: https://www.xenex.com/our-solution/lightstrike/



Current Design

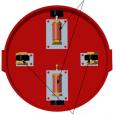


Figure: Side view of the proposed robot design

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Current Design

Differential Drive Wheels



Caster Wheels

Figure: Bottom view of the proposed robot design

Development Plan

CAD Modeling

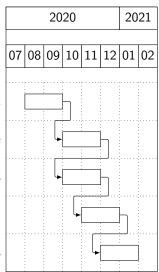
Redesign outer shell of the robot

Determine sensors to use

Create mount points for sensors

Design disinfectant sprayer mechanism

Design caster and drive wheel mounts

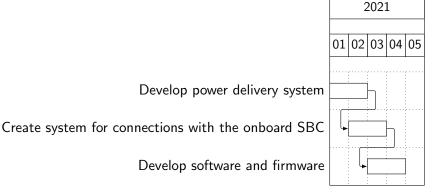




August 17, 2020

Development Plan

Electrical and Software Design



References I



Autonomous Robots Are Helping Kill Coronavirus in Hospitals https://spectrum.ieee.org/automaton/robotics/ medical-robots/autonomous-robots-are-helping-killcoronavirus-in-hospitals

Any Questions?