# DARSHAN KALOLA

# CONTACT

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Newark, NJ

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# FDUCATION

#### **Doctor of Medicine**

New Jersey Medical School Newark, NJ | 2020 - 2024

#### **B.S. Computer Science**

The College of New Jersey Ewing, NJ | 2016 - 2020 7-Year BS/MD Program GPA: 3.9

# AWARDS

#### Phi Beta Kappa

The College of New Jersey, 2020

#### **Best Rookie Team**

International Collegiate Programming Contest, 2019

#### **Finalist**

Northeast Google Games, 2017

#### **Best Technical Achievement**

HackTCNJ, 2017

#### **Best Demo Award**

HackRU, 2017

# INTERESTS

Classical Hindustani singing, rock climbing, table tennis, camping

## WORK EXPERIENCE

## SOFTWARE ENGINEERING INTERN

## GOOGLE | SAN BRUNO, CA | SUMMER 2020

 Designed and developed a public-facing YouTube TV feature using Google Configuration Language and Python.

#### RESEARCH INTERN

## WEILL CORNELL MEDICINE | NEW YORK CITY | SUMMER 2019

 Developed a platform to estimate in-silico cardiac-cell model parameters for drug safety screening using genetic algorithms as part of Dr. David Christini's lab.

#### SOFTWARE ENGINEERING INTERN

## GOOGLE | SUNNYVALE, CA | WINTER 2019

 Designed and implemented a deep neural network for biometric authentication as part of the Google Artificial Intelligence Healthcare team.

# **ACTIVITIES**

# PATIENT COMPANIONSHIP CI UB

NJMS | 2020-2022

 Met with lonely and at-risk patients at University Hospital, Newark, to keep them company and advance their recovery.

#### NJMS BOOK CLUB

NJMS | 2020-2022

 Served as executive board member and helped organize and host book club meetings for NJMS students.

# TUTOR TO INCARCERATED INDIVIDUALS

The Petey Greene Program | 2016-2020

 Tutored incarcerated persons in a correctional facility on a weekly basis, aiding their effort to complete a GED before release.

# **MANUSCRIPTS**

- Alexander P. Clark, Siyu Wei, Darshan Kalola, Trine Krogh-Madsen, David J. Christini. An in silico-in vitro pipeline for drug cardiotoxicity screening identifies ionic proarrhythmia mechanisms. British Journal Pharmacology. 2022.
- Hojun Yoo, Sudeep Peddireddy, **Darshan Kalola**, Douglas J. Opler. Experiences of psilohuasca use as reported on online internet forums. *Submitted to Journal of Psychoactive Drugs in March 2022.*
- Somnath Ganapa, Sudeep Peddireddy, A. Dmitri, **Darshan Kalola**, Mina Le. Reasons for delays in diagnosis and treatment of head and neck cancer. *Submitted*, 2022.
- Rohan Shah, **Darshan Kalola**. Current state of hyaluronic acid fillers in the United States. *In preparation*, 2022.

# **ABSTRACTS**

- **Darshan Kalola**, Aretha Zhu, Arjun Gupta, Navya Pendyala, Ishani Patel, Miriam Habiel. Al-based sentiment analysis of postoperative experiences of various refractive surgeries as reported on an online internet forum. *Submitted to American Society of Cataract and Refractive Surgery*, 2022.
- Darshan Kalola, Owais Aftab, Anup Dupaguntla, Megh Shah, Mohamed Rupani. The connection between a ketogenic diet
  and dry eye disease as reported on online forums. Submitted to Association For Research in Vision and Ophthalmology,
  2022.
- Darshan Kalola, Victoria Vought, Navya Pendyala, Arjun Gupta, Rohan Shah. Using artificial intelligence to assess the
  quality and subjectivity of online content about blepharitis. Submitted to Association For Research in Vision and
  Ophthalmology, 2022.
- **Darshan Kalola**, Aretha Zhu, Owais Aftab, Rohan Shah, Sree Chinta. An evaluation of the quality of tiktok dry eye disease content. *Submitted to Association For Research in Vision and Ophthalmology*, 2022.
- Navya Pendyala, Ishani Patel, **Darshan Kalola**, Dhiraj Sibala, Michael Hegazin, Jean Anderson Eloy. Factors that increase the risk of postoperative superficial surgical site infections and postoperative bleeding in rhinoplasty patients. *Submitted to the Triological Society Conference*, 2022.
- Sree Chinta, Dhiraj Sibala, Owais Aftab, **Darshan Kalola**, Michael Hegazin, Jean Anderson Eloy. Association between international normalized ratio (INR) and postoperative outcomes of tracheostomies. *Submitted to the American Rhinological Society*, 2022
- Sree Chinta, Dhiraj Sibala, Owais Aftab, **Darshan Kalola**, Michael Hegazin, Jean Anderson Eloy. Association between geriatric nutritional risk index (GNRI) and postoperative outcomes of tracheostomies. *Submitted to the American Rhinological Society*, 2022.

# **PRESENTATIONS**

- **Darshan Kalola**, Rocheny Noziere, Mehdi Lemdani, Sree Chinta, Allison Dinar, Ozlem Gunal, Petros Levounis. Curation of mental health keyword search of social media platforms. Urban Health Symposium, 2022.
- **Darshan Kalola**, Sudeep Peddireddy, Temitope Ali, Sree Chinta, Allison Dinar, Ozlem Gunal, Petros Levounis. Youtube as a source of information for binge eating disorder. Urban Health Symposium, 2022.
- Temitope Ali, **Darshan Kalola**, Sudeep Peddireddy, Allison Dinar, Ozlem Gunal, Petros Levounis. Evaluating the impact of stigmatized search queries when using YouTube as a source of information for substance use disorder. Urban Health Symposium, 2022.
- Darshan Kalola, John DeGood. Analysis of electronic health records feature sets. Celebration of Computing, The College

- of New Jersey. December 2019.
- Darshan Kalola, Trine Krogh-Madsen, David Christini. Induced pluripotent cardiac stem cell modeling with genetic algorithms. Weill Cornell/Memorial Sloan Kettering Computational Biology Summer Symposium. August 2019.
- Darshan Kalola, Jun Huang, Nick Post. Use of deep neural networks for photoplethysmography based biometric authentication. Google Artificial Intelligence Healthcare All Hands. March 2019.
- Darshan Kalola, Dmitris Papamichail. Computational tools for de novo gene design. Celebration of Computing, The College of New Jersey. April 2018.

# SELECTED SOFTWARE PROJECTS

## THE DEPRESSION CHECKLIST

Web | 2022 | https://github.com/kalolad1/depression-checklist

• A website that organizes various elements of the biopsychosocial model of depression.

#### BINGE EATING DISORDER EMERGENCY MOTIVATION

Web | 2021 | https://bedemergency.herokuapp.com

• A website that provides links to motivational material to help individuals resist and urge to binge eat.

#### **COSMOS EHR**

Web | 2020 | https://github.com/kalolad1/cosmos

• A web-based modern electronic health records system for primary care physicians with streamlined workflows.

#### NERVETELLIGENCE

Mixed iOS Application/Hardware | 2019 | https://devpost.com/software/homecare-qfd9c0

• A hardware device that allows physicians to remotely assess patient outcomes after a stroke.

#### EHR TIMELINE

Web | 2019 | https://github.com/kalolad1/ehr-timeline

• A web app to display, filter, and rank order a patient's medical history by clinical significance.

## **HOMECARE**

iOS Application | 2017 | https://devpost.com/software/homecare-qfd9c0

 An iOS application allowing patients to learn more about their musculoskeletal injuries using Swift, Amazon Alexa, and the BetterDoctor API.

# SNP GENE ANALYZER

Web | 2017 | https://devpost.com/software/homecare-qfd9c0

• A web app that identifies SNPs in an individual's genome and displays relevant clinical diseases.