# Kannan K. Puthuval

424 E Avocado Crest Rd Phone: (312) 600-4057

La Habra Heights, CA 90631 Email: kannan.puthuval@gmail.com

## Experience

Software Engineer, The Scotts Company, 2017 - present.

- Directed an international team to maintain system uptime and security for 15k customers.
- Oversaw a comprehensive upgrade of automated build systems for over 20 applications.
- Architected the major rewrite of an embedded Linux application.
- Executed mechanical design and new product development of a smart irrigation timer.

Chief Scientist & Director of Product Development, Oso Technologies, 2015 - 2017.

- Oversaw the development of four intelligent plant care products.
- Developed a technology for capacitive soil moisture sensing.
- Designed, prototyped, and tested injection-molded plastic enclosures.

Research Coordinator, University of Illinois SoyFACE Project, 2009 - 2015.

- Organized a diverse team to execute time-critical experiments in harsh outdoor conditions.
- Operated and maintained heavy equipment including tractors, excavators, liquefied gas systems, hydraulic soil probes, and off-road vehicles.
- Transformed worker safety by creating comprehensive new training and protocols.
- Designed, built, and maintained new research tools.

Volunteer, Engineers Without Borders UIUC Nigeria Water Project, 2011 - 2012.

- Supervised repairs and upgrades to a village water system.
- Surveyed the system and created documentation using GPS and local landmarks.

Foreign English Teacher, Jishou University, Hunan Province, China, 2007 - 2008.

- Taught college English to Chinese students.
- Tutored students in preparation for standardized English exams.

Co-Director, The Bike Project of Urbana-Champaign, 2005 - 2007.

- Co-founded a cooperative bicycle repair shop serving the community.
- Secured donations of over 40 bicycles and repair equipment.

Kannan K. Puthuval 2

## **Education and Certifications**

- B.S. Integrative Biology, University of Illinois, 2007
- Instructor, Motorcycle Safety Foundation Basic Rider Course, 2012
- EMT Course, West Coast EMT, expected June 2020
- BLS Provider 205509793972, American Heart Association, 2020
- Basic Sailing 32-foot, Aventura Sailing Association, 2019

## **Patents**

• Mane, M., Singer, D., Puthuval, K. (2018) *USD829574S1* Retrieved from http://patft1.uspto.gov/netacgi/nph-Parser?patentnumber=D829574

#### **Publications**

• Gray, S.B., Strellner, R.S., Puthuval, K.K., Ng, C., Shulman, R.E., Siebers, M.H., Rogers, A., and Leakey, A.D.B. (2013). Minirhizotron imaging reveals that nodulation of field-grown soybean is enhanced by free-air CO<sub>2</sub> enrichment only when combined with drought stress. *Functional Plant Biology* 40, 137-147.

#### Athletic interests

- Long-distance running
- Long-distance self-supported cycle touring
- Backcountry hiking and mountain climbing

#### References

- Anthony Huy, Director of Digital Technologies, The Scotts Company (anthony.huy@scotts.com)
- Kaido Kert, Tech Lead Manager, YouTube (kaidokert@gmail.com)
- Mercedes Mane, COO, The Product Manufactory (mercedes@theproductmanufactory.com)

Last updated: February 15, 2020