

# Curriculum Vitae

SHINGO OBATA  
Postdoctoral Research Associate  
706-380-4123  
sobata@utk.edu

---

## EDUCATION

- May 2020 Ph.D. in Forestry at [Daniel B. Warnell School of Forestry and Natural Resources, the University of Georgia](#)  
<Major> Forest management & Remote sensing  
<Ph. D. Thesis> *Application of Landsat time series to the spatially explicit estimation of the forest disturbance history and growing stock volume in Georgia, United States*
- Mar 2016 Master of Science in Agriculture at [the Graduate School of Agricultural and Life Sciences, the University of Tokyo](#)  
<Major> Forest Science  
<Master Thesis> *Analysis of the optimal harvest age of private forest considering carbon sequestration function of the forest*
- Mar 2014 Bachelor of Science in Agriculture, [Faculty of Agriculture, the University of Tokyo](#)  
<Major> Forest Science  
<Bachelor Thesis> *Development of the research on optimal harvesting age*

---

## RESEARCH INTERESTS

Forest management, Land use change, Forest inventory analysis, LiDAR, Digital aerial photogrammetry processing, Remote sensing, Machine learning, Deep learning.

---

## EXPERIENCE

- 9/2020~present Postdoctoral Research Associate at [the National Institute for Mathematical and Biological Synthesis](#)
- 8/2016~12/2019 Teaching Assistant, Daniel B. Warnell School of Forestry and Natural Resources, University of Georgia (Field Orientation, Measurements, and Sampling in Forestry and Natural Resources)
- 9/2015~6/2016 Research Assistant, *Mitsubishi UFJ Research and Consulting*
- 4/2015~7/2015 Teaching Assistant, the College of Arts and Sciences, University of Tokyo (First-Year Seminar for Natural Science Students)
- 7/2011~6/2012 Chief editor, the University of Tokyo Newspaper
- 4/2010~8/2012 Writer, University of Tokyo Newspaper, a weekly newspaper for students and workers at the University of Tokyo.

---

## REFEREED ARTICLES

---

### SUBMITTED ARTICLE

Obata, Shingo, Pete Bettinger, Chris J. Cieszewski, and Roger C. Lowe III (forthcoming). "Effect of the length of the Landsat time series on the estimation of growing stock volume of the forest stand in Georgia, United States." *Submitted to Forest Ecology and Management*.

---

### PUBLISHED ARTICLES

Obata, Shingo, Pete Bettinger, Chris J. Cieszewski, and Roger C. Lowe III (2020). "Mapping Forest Disturbances between 1987-2016 Using All Available Time Series Landsat TM/ETM+ Imagery: Developing a Reliable Methodology for Georgia, United States." *Forests* 11.3, p. 335. URL: <http://dx.doi.org/10.3390/f11030335>.

Obata, Shingo, Chris Cieszewski, Pete Bettinger, Roger C. Lowe III, and Sergio Bernardes (2019). "Preliminary analysis of forest stand disturbances in coastal Georgia (USA) using Landsat time series stacked imagery." *FORMATH* 18, pp. 1–11. URL: <https://doi.org/10.15684/formath.001>.

Zhang, Siyu, Pete Bettinger, Chris Cieszewski, Scott Merkle, Krista Merry, Shingo Obata, Xingyuan He, and Haifeng Zheng (2019). "Evaluation of sites for the reestablishment of the American chestnut (*Castanea dentata*) in northeast Georgia, USA." *Landscape Ecology* 34.4, pp. 943–960. URL: <https://doi.org/10.1007/s10980-019-00818-7>.

Akbulut, Ramazan, Pete Bettinger, Zennure Ucar, Shingo Obata, Kevin Boston, and Jacek Siry (2017). "Spatial forest plan development using heuristic processes seeded with a relaxed linear programming solution." *Forest Science* 63.5, pp. 518–528. URL: <https://doi.org/10.5849/FS-2017-040>.

Akbulut, Ramazan, Zennure Ucar, Pete Bettinger, Krista Merry, and Shingo Obata (2017). "Effects of forest thinning on static horizontal position accuracy collected with a mapping-grade GNSS receiver." *Mathematical and Computational Forestry & Natural-Resource Sciences* 9.1, pp. 14–21. URL: <https://mcfns.net/index.php/Journal/article/view/9.2>.

Obata, Shingo, Shin Nagata, Hiromichi Furuido, and Taro Takemoto (2015). "The development process of research into the theory for the determination of optimal harvest age." *Kanto Forest Research* 66.2, pp. 221–224.

---

### NON-REFEREED ARTICLES

Obata, Shingo (2018). "Estimation of forest stand disturbance through implementation of vegetation change tracker algorithm using Landsat time series stacked imagery in coastal Georgia." *Mathematical and Computational Forestry and Natural-Resource Sciences* 10.1, p. 32. URL: <https://mcfns.net/index.php/Journal/article/view/10.9/2018.9>.

---

### THESIS

Obata, Shingo and this link will open in a new window Link to external site (2020). "Application of Landsat Time Series to the Spatially Explicit Estimation of the Forest Disturbance History and Growing Stock Volume in Georgia, United States." PhD thesis. United States – Georgia: University of Georgia. 152 pp. URL: <http://search.proquest.com/pqdtglobal/docview/2411060437/abstract/812D084A09714D86PQ/1> (visited on 06/12/2020). ISBN: 9798645486013.

---

## PRESENTATIONS

- Obata, Shingo, Pete Bettinger, Chris Cieszewski, and Roger C. Lowe III (Mar. 2019). *Estimation of the growing stock volume of the forest stands in Georgia, USA using FIA data*. Oral presentation at 130th Annual Japanese Forest Science Meeting. Niigata, Japan. National Conference, In Japanese.
- Obata, Shingo, Chris Cieszewski, Pete Bettinger, Roger C. Lowe III, and Sergio Bernardes (Oct. 2018). *Estimating the last disturbance year of forest stands in Coastal Georgia using all the available Landsat imagery with Google Earth Engine*. Poster presented at ForestSAT 2018. Maryland, United States. International Conference.
- Obata, Shingo, Chris Cieszewski, Roger C. Lowe III, Pete Bettinger, and Sergio Bernardes (Mar. 2018). *Estimation of forest stand disturbance in coastal Georgia*. Oral presentation at FORMATH FUKUOKA. Fukuoka, Japan. International Conference.
- Obata, Shingo, Chris Cieszewski, Pete Bettinger, Roger C. Lowe III, and Sergio Bernardes (Aug. 2017). *Spatiotemporal analysis of Landsat imagery for assessment of disturbance tracking in coastal Georgia*. Oral presentation at the 17th Symposium for Systems Analysis in Forest Resources. Washington, United States. International Conference.
- Obata, Shingo, Chris Cieszewski, Pete Bettinger, Roger C. Lowe III, and Sergio Bernardes (Dec. 2017). *Estimation of forest stand disturbance through implementation of Vegetation Change Tracker algorithm using Landsat time series stacked imagery in coastal Georgia*. Poster presented at 11th Southern Forestry and Natural Resource Management GIS Conference. Georgia, United States. Regional Conference.
- Obata, Shingo, Shin Nagata, Hiromichi Furuido, and Taro Takemoto (Mar. 2016). *Taking account of carbon fixation ability of harvested wood product for decision making in the forest management*. Japanese. Poster presented at 12th Annual Japanese Forest Science Meeting. Kanagawa, Japan. National Conference.
- 

## GRANTS

- 9/2016–8/2019      Student Exchange Support Program from Japan Student Services Organization (\$31,654 for each year)
- 

## AWARDS

- 3/2015              Won the competition for the new logo mark of The Japanese Forest Economic Society.
- 

## WEBSITES

- ResearchGate      [https://www.researchgate.net/profile/Shingo\\_Obata](https://www.researchgate.net/profile/Shingo_Obata)
- GitHub              <https://github.com/ShingObt>
- Linkedin            <https://www.linkedin.com/in/shingo-obata-b48a25106/>
- Twitter              <https://twitter.com/ShingObt>
- 

## SKILLS

- Programming      R: For data analysis & machine learning  
Python: For deep learning, machine learning & data visualization  
Javascript: For Google Earth Engine code  
PostgreSQL: For national forest inventory data handling

Geospatial Software	ArcGIS ERDAS Imagine ENVI Google Earth Engine Agisoft PhotoScan
Language	Japanese: Native English: Advanced French: Basic knowledge

Last Modified on October 24, 2020